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LECTURES BY M. DE BLAINVILLE ON COMPARATIVE OSTEOLOGY.

THE

COMPARATIVE OSTEOGRAPHY

OF THE

SKELETON AND DENTAR SYSTEM

IN THE FIVE CLASSES OF

VERTEBRAL ANIMALS,

RECENT AND FOSSIL.

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WITH GRAPHIC DELINEATIONS BY M. WERNER;

EDITED (FROM THE FRENCH) AND

ADDITIONALLY ILLUSTRATED

WITH NUMEROUS NOTES, OBSERVATIONS,

AND DRAWINGS,

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If we consider, first, the skeleton of the head generally, we find really no approach to that of any Rodent whatever, but, on the contrary, the closest resemblance to that of the Galagos and of the Loris. The occipital condyles, furnishing so good a character, altogether resemble the same structures in the Lemuridæ. In fact, the anterior margin of the great occipital foramen is almost opposite the external auditory canal; moreover, the occiput projects behind the posterior margin, and the external surface of the occipital bone is rounded or swollen, and directed obliquely forwards, in order to unite at the foramen; whilst in the Rodents, however elevated they may be in the series, this posterior surface of the occiput is vertical, and the condyles are situated altogether at the extremity of the long diameter of the head, provided, indeed, that the whole of the cranium does not appear arched or curved in its length, as occurs more especially in the Hare (*Lepus*, Linn.). But even this, somewhat anomalous disposition, does not at all change or affect the terminal position of the condyles.

The head, viewed in profile fig. 54, differs also entirely from the Rodents. In the Rodentia, the whole convexity of the superior coronal line belongs almost entirely to the face and forehead; whilst in the Aye-Aye, it is the cranium that is thus curved. Moreover, in studying the proportions of the face and cranium, these again are found to be totally different.

The face in the Aye-Aye is pretty nearly equal to the cranium properly so called; whilst in the Porcupine, for example, the cranium is only about one-half the length of the face; this enormous disproportion is still better seen externally. A longitudinal section (fig. 57) along the whole of the head, which I myself made with the greatest care, shows the cerebral cavity to be larger than the face in the Aye-Aye; whilst in the Porcupine it is scarcely one-half so large.

Thus, the position of the great occipital foramen, and the proportions just stated, prove the Aye-Aye to belong rather to the Quadrumana than to the Rodents; and this is further confirmed by the diameter of the great occipital foramen, when compared with the cerebral cavity, being as 1 to 3½ in the Aye-Aye, and as 2 to 3 in the Porcupine.

Let us now consider if the details respecting the different parts, composing the head, support these first inductions.

The very large and rounded form of the cranium in every direction, and particularly behind, or, in other words, on the occipital aspect, warrants the supposition that the posterior lobes of the brain were proportionally developed. A very moderate-sized occipital crest, looking like the continuation of the upper root of the zygomatic arch, more resembles that of the Lori Tardigradus than of the Rodents, in which animals it is perpendicular to the direction of this arch. There is no trace of the sagittal crest, which is the contrary of what happens in the Rodents, which have the temporal muscles large, and consequently the fossæ deep; the two upper lines being very close to each other, as takes place in the Loris, so that the fibres of the temporal muscle must proceed almost perpendicularly

to the coronoid process of the lower jaw; whilst in the Rodents the temporal fossa is, in the first place, very small, the cranium also being small; next, it is pushed very much backwards, giving thus an oblique direction to the muscular fibres, and permitting of the motion forward and backwards of the lower jaw, so necessary to the Rodents.

Fig. 54.

Fig. 55.

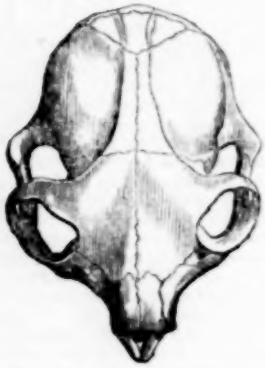
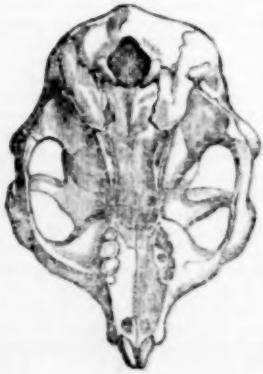


Fig. 56.



Aye-Aye of Madagascar,* natural size' female (*L. Psilodactylus*, Shreber).

The phalanges of the fingers, never having been divested of their integumentary covering, are represented with it still present, which interferes slightly with our view of their proportions; but this could not be avoided, owing to the great value of the specimen, as an object of natural history.

Fig. 57.

Fig. 57. Longitudinal section of the cranium of the Aye-Aye.

On the inner aspect of the cranium we find the relations to the Quadrumana still more marked, in the great number of eminences and depressions, corresponding to cerebral convolutions proportionally developed; the contrary to all this happens in the Rodents.

We observe also, a marked distinction between the anterior and middle cerebral fossæ, arguing the presence of a fissure of Sylvius equally well marked, and a corresponding elevation of the middle cerebral lobe. Now, neither this elevation nor depression exists in the Rodents, so that the brain is almost plain below, as it is without convolution above. The arrangement also for the attachment of the tentorium of the cerebellum, shows that, at least, a part of this organ must be covered by the posterior lobes of the brain; whilst in the Rodents the cerebellum seems placed altogether behind the cerebrum.

The prominence of the body of the sphenoid, forming the *sella turcica*, and a considerable depression which may be seen behind it, argues a well developed *pons*

* Aye-Aye Madegascariensis, Cheiromys Madagascariensis, Desm. 132 species.
Sciurus Madagascariensis, Linn.
Fig. 54. *Cranium* viewed in profile.
Fig. 55. *Cranium* viewed from above.
Fig. 56. *Cranium* viewed from below.
All the engravings of the cranium of the Aye-Aye, and the portions of the skeleton, are taken from the original specimen in the zoological collection, with the authority of M. E. Geoffroy; the head, forearm, and carpus, at my own request, in 1816, for the drawing up of my memoir, and the tarsus by the request of Mr. G. Cuvier for his great work.

Varolii; whilst, on the other hand, the want of depth in the *sella turcica* implies a small pituitary body, which in the Rodents is always large.

On the basis of the cranium there is no trace of mastoid process, which in the Rodents is very large. The great wing of the sphenoid articulates with the frontal, parietal, and temporal bones, as in the Simiadæ; whilst, in the Rodents, it is very far from reaching the parietal.

The parietal bones themselves are perfectly distinct; a character which seldom happens in the Rodentia. The frontal is divided into two lateral parts, as in the Rodents; but this arrangement also occurs in the Loris.

The cavities for the organs of the senses resemble, generally, the same parts in the Loris. The cavity of the tympanum is large, compressed, broader from before backwards, than transversely from side to side: it has anteriorly a small process, and adheres perfectly to the squamous part of the temporal, the contrary of what happens in the Rodentia, the cavity of the tympanum (*bulla*) being in the latter entirely free, and as it were suspended upon the lateral parts of the cranium, almost as in the Pachydermata. The orifice of the external auditory canal, or rather the continuation of the tympanic cavity (for there is really no canal), is placed at the basis of the root of the zygomatic arch, and consequently its anterior edge is formed by the root of the zygomatic process itself. It is very large, *open*, as in the Loris, and nearly all Lemurs, directed backwards, and not upwards as in the Rodents.

The orbit is very large, looking forward as much as in the Loris and in the Tarsiers; whilst in the Rodents it is altogether lateral, and its border or circumference is quite complete, which never happens in the Rodentia, although it communicates largely with the temporal fossæ as in the Rodentia; but this character is also found in two species of the Loris, a little less so in the Tarsier, decreasing as we ascend to the highest of the Makis, and increasing as we descend, in consequence simply, of the winding of the spheno-maxillary fissure.

The lacrymal bone enters into the composition of the face for a great part of its extent, as in the Loris and the Tarsiers; and the opening of the lacrymal canal is in all of them external to the orbit, and in the face itself; whilst in the Rodentia, this bone scarcely enters into the composition of the face. In these animals, also, there is a small process for the insertion of muscles, of which there exists not a trace in the Aye-Aye; whilst the orifice of the nasal canal, which is very large, is altogether inside the orbit. The intra-orbitar space, as well as the back of the nose itself, is excessively large in the Aye-Aye, and much more so than in the Loris and the Galagos, in which this space is merely a partition, as in birds; and in this point of view, it is not to be denied that there is a resemblance with the Rodentia: nevertheless, in these animals, the space at the back and root of the nose and forehead is really larger than that which separates the orbits themselves, which is not the case in the Aye-Aye.

The nasal cavity is, in general, sufficiently large, although much less than in the Rodents. The vomer forms a complete partition, as far as the posterior extremity of the nostrils, as takes place in the Lori Tardigradus and Tarsier; but in the Rodentia it is very different, the vomer forming only a median crest; and in them the points of the nasal bones project, more or less, over and beyond the nasal openings, which does not happen in the Aye-Aye, nor in the Galagos or Tarsiers.

The zygomatic arch of the Aye-Aye is very large, and swollen outwards, superiorly, and externally, as in the Loris; whilst in the Rodents it is always weak, narrow, more or less depressed inferiorly, and less flattened on the sides of the head.

In these animals the posterior root of the zygomatic arch is directed, more or less, downwards, instead of outwards, forming a sort of groove in which the temporal muscle plays; whilst, inferiorly and posteriorly, it is deeply excavated by another groove directed from before backwards, and whose free posterior margin forms a sort of canal in which plays the condyle of the lower jaw, but without in any way reaching the external auditory opening. In the Aye-Aye, on the contrary, the root of the zygomatic arch, assisting in forming the glenoid cavity, is very large, as in the Loris and Tarsiers; the articular surface is altogether plane, and scarcely excavated from before backwards, either by the anterior margin of the cavity of the tympanum, as in the Lori Tardigradus; or by the cavity itself, as in the Lori Gracilis; nor by the auditory canal, as in the Tarsiers; and this establishes a real difference between these animals: but after all, this cavity is not more plane than in the Lori Tardigradus.

The pterygoid processes of the Aye-Aye, like those of the Lori, are very large, distinct, and almost vertical. The external even touches the cavity of the tympanum, as in the Tarsier, being united to its external side.

There is a very large spheno-palatine foramen; and an additional foramen, perforating the lamina of the pterygoid process, and communicating with the pterygoid fossa.

The palatine bones are square, and advance upon the palatine arch as far as the level of the second molar tooth (*counting from behind*), as in the Lori Gracilis and Tardigradus, especially; but they are narrower than in these two animals, and hence approach slightly the Rodentia.

The posterior margins of these bones form

at their union a small process, which is not found in any Rodent.

The malar bone completes, as in most mammals, the zygomatic arch; the inferior margin, instead of terminating towards the last molar, or, at least, the anterior molar, as in the Loris and the Tarsiers, is prolonged, as far as the first molar, pretty nearly as in the Rodents. Moreover, the malar bone is large and strong, its orbitar branch elevated, forming with the body of the bone the inferior and external half of the orbit, which it also completes in its circle, and which we shall not find to be the case in any Rodent. Its zygomatic process is also very large, strong, and rounded horizontally and externally.

The superior maxillary bone is (comparing the cranium with the face) very short, thick, and elevated, articulated as usual with the malar bone externally; the nasal bone above, the frontal and lacrymal behind; but it is free anteriorly, that is to say, there is no incisive bone* in this animal, and, consequently, the *incisive* teeth so named are, perhaps, merely canine teeth having this very peculiar form, and this we shall endeavour to prove farther on. The superior maxillary bone differs essentially from that of the Rodents, in being deficient in that large suborbitar fossa which exists in the greater number of these animals, and is intended to lodge a particular muscle which is peculiar to them, or rather, perhaps, a subdivision of the masseter, and not at all, as some authors state, to allow of the escape of nerves; in fact, in the Rodents, the real suborbitar foramen, very distant from the fossa of which we now speak, is placed at the anterior root of the zygomatic arch. In the Aye-Aye there is but one suborbital foramen for the escape of the nerves of that name.

Towards the middle of the anterior margin of the lacrymal bone, may be seen the commencement of a suture, which would, at first sight, appear, as it extends towards the middle of the superior maxillary bone, to divide that bone into two parts, an anterior and a posterior. Now the anterior would be the intermaxillary bone; and, in fact, this was the view which I took with regard to it at first, but several considerations induced me to alter my decision, and to return to the opinion I have just offered.

In fact, it would be very curious if the intermaxillary bones were really entirely united to the maxillary, with the exception of their upper part, when all the sutures connecting the other cranial bones are perfectly distinct, the opposite to what happens in the Rodents, in which the intermaxillary bone has always its sutures visible.

The supposition that the intermaxillary bones were present, would lead to another curious anomaly, for the superior maxillary bones in that case would cease to have any connection with the nasal bones which always takes place in the *order* in which I wish to place the Aye-Aye; whilst, on the contrary, in the Rodent it is an almost exclusively distinctive character for the maxillary bones to have no connection with the nasal bones.

It is the same, also, with the articulation of the intermaxillary bones with the frontal;

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* That the intermaxillary bones may have united to the maxillary in the Aye-Aye, at a very early period of its growth, is a circumstance by no means improbable, and we, therefore, feel rather surprised that M. De Blainville should even have hinted at the probability of their not been originally developed. The law which causes a suture to disappear early in one class, or even species of animals, and in others remain distinct up to the latest period of their existence, is evidently not in any way understood. We were the first, in Edinburgh at all events (five years before it was even hinted at on the Continent), to show in our Museum the presence of the intermaxillary bones in the human species: the law in man appears to be that these bones should, at a very early period of fœtal growth, unite with the superior maxillary, but they sometimes remain separate, and the suture (particularly the palatine) remains distinctly marked throughout life, even in man. The supposition that the intermaxillary bones were entirely absent in the Aye-Aye, we are humbly of opinion has given rise to views with regard to their anterior and very remarkable teeth, which will not hold their ground. We need not remark that we have ourselves never seen a specimen of the Aye-Aye, there being at the present day, June, 1840, no specimen dead or alive in Britain; and it was a presumption, therefore, to offer an opinion as to whether the teeth are strictly analogous to those of the Rodents or not. In 1833, Mr. Frederick Knox read a memoir to the Royal Society of Edinburgh, "*on the true nature of the gnawing teeth in the Rodentia*," which memoir it is our intention to publish in the pages of THE LANCET, when our author comes to treat of the class Rodentia. We may here remark, however, that Mr. Knox demonstrated, from dissections, on the crania of the Beaver, Porcupine, Hare, &c.; that the gnawing teeth in the upper jaw merely pass through the intermaxillary bones, and it is, therefore, a misnomer to call them incisive; but the most important part of the memoir was the demonstrating that the so-named incisive teeth had their root or formative pulp in a *cul de sac*, or process of the lacrymal bone. These teeth, therefore, are quite peculiar, and are neither analogous to the incisives or canines of the mammals. The term "lacrymal teeth" would be a good name for them.—*R. Knox.*

and this distinguishing peculiarity of the Rodents is found only in a very small number of other genera. But an anomaly, of which we find no other example in the class Mammalia, were we to suppose the intermaxillary bones really present in the Aye-Aye, would be the *non*-articulation of the maxillary with the frontal, which bone (maxillary) articulates with the frontal in all mammalia, and, probably, even in all vertebrata.

If our mode of viewing the subject be not adopted, it becomes necessary to view the intermaxillary bones as extremely developed, since, as we shall see by and by, they carry singularly large teeth. Now these bones, in general very small in the Makis, are very large in the Rodents, in which they present the peculiarity of articulating with the frontal, excluding the maxillary bone from all connection with the nasal; a circumstance which, I repeat, is found in all the Rodents, and which seems to depend on this, that these bones required a solid point of support, in consequence of the size of the teeth they carry. From this it results that the bones of the nose would no longer articulate with the maxillary; but it is a peculiarity which I have observed only in the Aye-Aye, that this pretended intermaxillary bone, united at the same time to the frontal, would also join the lacrymal, with which in this supposition the maxillary bone would alone be articulated.

There is a circumstance which induces me to think that this anomaly, in respect to the intermaxillary bones of the Aye-Aye, is determined as in the Rodents, by an analogous dentar arrangement, it is this, that there are incisive foramina larger, and more rounded than in the Loris, and very nearly as in the Tarsiers, although narrower and less elongated, and particularly not so far back as in the Rodents; and, *secondly*, that in the Tarsier of Daubenton, whose first pair of incisive teeth is extremely developed, we find an intermaxillary bone which sends a slender process between the nasal and maxillary as far as the frontal, and articulates with all the three. And, moreover, it appears that in the Tarsier of Daubenton the superior maxillary does not reach the frontal;* a character which is not found in the Rodents, nor in any other mammal, at least to my knowledge.

The lower jaw, although at first sight it may seem to resemble the Rodentia, yet differs from them in all respects. For, *first*, in all the Rodents the mandible is really shorter than the upper jaw, so that the same line of the interior edge of the mandible corresponds nearly to the middle of the toothless space of the jaw. In the Aye-Aye, on the contrary, both jaws are equal; and from this it happens, without doubt, that the incisive teeth are less exposed or projecting.

The general form of the lower jaw of the Aye-Aye shows a strong, large, and very compressed organ; the horizontal branch is much longer than the vertical, which follows nearly the same direction. The condyle is straight, and almost at the posterior extremity of the jaw. Its form, which is characteristic, and which ought to resemble entirely the condyle in the Rodents, if the teeth regarded as incisive really were so, differs greatly from them. *In fact*, the condyle is certainly longer than it is broad; but it is oval, and narrow in front, precisely as in the Tarsiers, which shows no trace of a glenoid cavity, and, contrary to what happens in the Lori Tardigradus, where the condyle is altogether transverse.

In the Rodentia the condyle has generally a very peculiar form, that is to say, compressed from within outwards; but it may also be sometimes enlarged into a kind of head, the articular cavity being constantly conformable to this arrangement. The coronoid process in the Aye-Aye is perpendicular to the general direction of the jaw, large, strong, compressed, and reaching nearly to the middle of the temporal fossa, as in the Loris. In the Rodentia, on the contrary, this process, slender and elevated, is curved backwards, in correspondence with the almost horizontal direction of the temporal muscle. Finally, the notch which separates the two processes is very large, though not deep, and inclines from before backwards in the Aye-Aye, whilst it is always very narrow and much smaller in the Rodents: but the descending line of the anterior edge of the coronoid process is prolonged pretty nearly, as in these animals, as far as the first molar teeth, which certainly does not occur in the Galagos nor in the Tarsiers. In respect to the internal orifice of the dentar canal, there exists no difference, neither for the mental orifice, which is single; but in respect to the inner surface of the ascending branch it is not the same, being entirely smooth, as in the Tarsiers and the Galagos, instead of having that deep excavation, extending within the angle, for lodging the powerful external pterygoid muscle.

* It would appear that Mr. Fisher, in his anatomy of the Makis, had not observed this peculiarity; in fact, he says, in his description of a new species of Tarsier, that "the intermaxillaries are separated anteriorly, and obliterated on the two sides next the upper jaw."

CLINICAL LECTURES

ADDRESSED TO THE

STUDENTS OF THE MIDWIFERY CLASS

AT THE ROYAL SCHOOL OF MEDICINE,

BIRMINGHAM,

BY

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LECTURE X.

ON FIBROUS TUMOURS OF THE UTERUS.

(First division of the concluding Lecture.)

GENTLEMEN:—Having already submitted to your notice some preparations of the fibrous tumour of the womb, and given several of you an opportunity of personally investigating the disease, and having, moreover, an opportunity of showing you a specimen of fibrous tumour removed yesterday by ligature, I now propose to consider the subject generally, as the best commentary I can possibly make on the cases in question. Indeed, I feel convinced, that in no other way is it possible for me to treat so comprehensive a subject, either with justice to myself, or profit to you. Although I have seen a great variety of cases of this disease, I am but imperfectly acquainted with the result of the smaller description of tumours. In most of the instances, however, the tumour ceased to give trouble, and in some of them entirely disappeared. I have kept accurate and copious notes of the more important of the cases, of which I am about to give a brief summary. Of forty-seven cases, thirty-seven occurred in married women, and ten in unmarried. Of the total number, nine died: one from mere exhaustion, the emaciation being extreme, and the tumour equal in size to the gravid uterus at term; three from inflammation of the tumour; one from peritonitis, after delivery; one from phlebitis; and one from hæmorrhage, in consequence of a fungoid growth of the lining membrane; one from a protracted hæmorrhage, in connection with ovarian disease, and one died under circumstances which I was unable to ascertain. Of the remaining th rty-eight cases (which I shall again advert to) the disease in several of them entirely disappeared, and continues in the rest in various states, though for the most part passive.

Fibrous tumours possess great diversity of character, both as to their situation, their size, number, position, and the symptoms by which they are distinguished. As respects their structure, there is every variation and grade between sarcoma and structures having the firmness of scirrhus, and in large and old tumours the phosphate of lime not unfrequently enters largely into their texture. In opposition to the opinion of Bayle, Dr. R. Lee believes, "that the greater number of these tumours never exhibit a muscular or fleshy appearance at any period of their existence, but have a fibrous structure equally distinct when not larger than a pea, and when exceeding in magnitude the head of the human adult."* An eminent pathologist, Dr. Hodgkin, when examining some specimens of this disease in my possession, observed, that the term fibrous tumour was incorrect, and reiterated his published opinion, that all such growths possess the essential structure of compound adventitious cysts.

There is no natural malignity in the structure of a fibrous tumour, neither is a malign tendency easily acquired. Whether or not malignant action ever occurs unconnected with an existing pregnancy, or with sloughing of the lining membrane of the uterus, which covers the tumour, I cannot determine; but, unquestionably, a long-continued irritation of the lining membrane may terminate not only in increased vascularity and thickening, but even in ulceration, or fungoid exerescence of a malignant kind. An instance of this, which proved fatal to life by ulceration and sloughing of the lining membrane, I have already brought before you. These malignant changes are accompanied by a sanious, offensive discharge, emaciation, loss of appetite, and sleep, a frequent feeble pulse, and a pale-yellow countenance, but rarely, I believe, by glandular contamination. It is allowed on all hands, that fibrous growths are not highly organised; indeed, it has been said that they are not supplied with vessels, and hence the futility of attempting to effect their absorption: the fibrous tumour has, however, been injected. In a case of this kind, treated by Dr. Thomson,† it is said, "he had been able to trace vessels in its substance proceeding from the centre to the circumference;" and this is not a solitary instance, for my friend Dr. Montgomery successfully injected one of these fibrous growths with very fine size. Perhaps the injections usually employed have not been equally well calculated to permeate the vessels, or the structure of the mass may have been too dense to receive any kind of injection.

The fibrous tumours may commence either singly or in masses, the size varying from that of a pea to that of an adult head; and they may arise in any part of the proper tissue of the womb, either just underneath the peritoneum, or under the lining membrane, or between them, and, ultimately, the disease may involve all the structures of the part. In this specimen the disease is confined to the body and fundus of the organ, but in another it extends to the neck. The descent

* Med. Chirur. Trans., vol. xix., p. 106.

† LANCET for 30th March, 1839, p. 54.

of the tumour has usually the effect of shortening the vagina, though in three instances I found it quite impracticable to reach the uterine orifice, which had been carried above the symphisis pubis.* Circumstances may also tend to force the womb on either side quite into the hypogastrium; thus constituting a kind of obliquity analogous to certain states of pregnancy, and distinct knobs may sometimes be felt on different parts of its surface.

The symptoms denoting the existence of the fibrous tumour correspond very much with the situation of the disease. Thus, when confined to the inferior and anterior part of the womb, the bladder will be rendered unusually irritable, and the sense of bearing down, especially in the erect posture, will be distressing. When the tumour projects posteriorly, it not only occasions pain in the sitting posture, and difficulty in passing the alvine discharges, but likewise pain in the rectum, and great irritability of the sphincter. The distress, however, as already stated, does not always correspond with the situation of the tumour. The mere sinking of the tumour is calculated to produce an expulsive effort, and under a very powerful action, fibrous bodies have been entirely disconnected from the uterus. You have an instance of this in the specimen before you; indeed, the softer kinds of polypi have not unfrequently been disconnected from the uterus, either by its general contractions, or by the contractions of the neck squeezing the stem to its complete separation: usually, however, the mass separates by sloughing, of which I shall adduce a striking example. The constitutional disturbance is not peculiar to inflammation. The effect of the fibrous tumour over the cerebro-spinal system is very striking, being denoted not only by pain in the lumbar part of the spine, but by severe hysteria on the approach of each menstrual period; in middle-aged women especially, hysteria not unfrequently depends upon organic changes of this nature. Functional disturbance of the digestive powers takes place just as it does in the early weeks of pregnancy, and the mammary sympathies are sometimes equally striking. I lately saw a patient in consultation who had a severe form of uterine hæmorrhage, said to depend upon placentar presentation. Milk was freely secreted, but, on examination, the symptoms were found to originate in a fibrous tumour, the size of a hen egg, connected with the upper part of the cervix uteri. An inflammatory state of the tumour will occasion a considerable degree of constitutional disturbance, and the severity of the symptoms will correspond partly with the size of the tumour, and partly with its locality. The symptoms which characterise a tumour in a state of acute inflammation cannot be misunderstood. They are augmentations of its volume; great pain, especially in moving; tenderness on pressure; a loaded, and sometimes a red and glazed tongue; frequent pulse; heat of surface; sickness and vomiting; thirst; constipation, and suppression of pre-existing discharges; rigors will rarely fail to indicate the stage of suppuration; the bladder will be more or less disturbed, the inflammatory action extending, perhaps, to its mucous membrane, and the rectum may be so affected as to constitute mechanical obstruction.

The local effect of a fibrous tumour upon the nervous tissue is very marked. One of the most striking instances of this occurred in a woman who had, for a length of time, suffered intense pain in one knee, and painful micturition, together with attacks of supposed inflammation of the bladder. The uterine derangement was apparently slight, and yet, on examination per vaginam, I detected a cluster of large and hard tumours underneath the peritoneal covering of the uterus. The pain in the knee continued very severe for two or three years, and the constitutional symptoms ultimately destroyed life. I have already expressed my con-

* The degree of malposition will correspond with the bulk of the tumour, and with its attachments to the womb posteriorly. Since this lecture was forwarded for publication, I have read the details of Dr. Beatty's interesting case of labour, complicated with a fibrous tumour, connected with the cervix uteri on its posterior surface. It appears that it was quite impracticable to distinguish the uterine orifice either prior to labour, or during the first twenty-seven or eight hours after labour had commenced; subsequently, however, the orifice was detected above the symphisis pubis. The tumour lay between the vagina and rectum, almost resting on the perineum, the entire pelvis being blocked up by it. At the commencement of labour it was supposed that the Cæsarian section would be absolutely necessary to the delivery, and yet the tumour ultimately receded sufficiently to permit Dr. Beatty to pass his hand into the vagina, and make pressure on the tumour in the direction of the axis of the brim. By this means the further elevation of the tumour was promoted, and, finally, the child (which presented by the breech) was delivered unmutilated. The parturient action had the effect of rectifying the unnatural axis of the uterus, and of elevating the tumour quite out of its position, by the gradual retraction of the posterior part of the cervix, and the shortening of the longitudinal fibres. Dr. B. refers to an old published case of procidentia uteri, a great part of the uterus being external to the body throughout pregnancy, and yet receding in the pelvis on the accession of the first strong labour pain.—*Dublin Medical Journal* for July 1, 1840, p. 411.

viction, that uterine neuralgia is rarely owing to mere functional disorder, and may sometimes be traced to the influence of a fibrous tumour over a naturally irritable temperament. In one of these instances, the vaginal examination was not only attended with severe pain, but followed by delirium, which continued more or less for several days; and, in a second instance, its effect upon the nervous system was almost equally striking. But, supposing the fibrous tumour to have been quite passive, the time, at length, may arrive when it receives an impulse, perhaps from marriage; the mass grows, is productive of pain, and menstruation becomes deranged. Pregnancy and lactation again lead to its active development, especially the former; inflammation, perhaps, attacks the tumour from time to time; its central parts soften; hæmorrhage may attend delivery, or peritonitis may follow it; and, supposing these evils to be averted, the tumour may become painful, and occasion numbness and œdematous swellings of one or both of the lower extremities. Inflammation may also extend to the veins, constituting phlegmasia dolens, as in one of the fatal cases already mentioned.*

Although the disease may be called into active operation, at any period of life after the establishment of the catamenia, it is rarely observed until the uterus has repeatedly suffered excitement. I am not aware that the development has been noticed antecedent to the first appearance of the menses, although I have detected the disease in girls under the age of twenty; but, according to Bayle, the development has not been noticed before the thirtieth year. The effect of fibrous formations over the functions of the womb are very dissimilar in different cases, though menstruation usually becomes excessive. Moderate-sized fibrous growths may, undoubtedly, exist in the uterine walls for years, especially in persons past the meridian of life, without affecting the health, or producing any kind of inconvenience, their existence not being even suspected; and yet, in young persons, the very reverse of this may happen. Indeed, the smaller kinds of tumour usually produce more acute suffering than tumours of a larger kind, whose bulk does not incommode the neighbouring parts. It would seem, therefore, that the disturbance in the uterine system will, in a great measure, correspond with the early development of the growth, just as in pregnancy the symptoms are more active in the early than in the latter weeks. A large-sized tumour is very likely to occasion a severe and protracted form of menorrhagia, which may continue for years unattended by coagulated discharge. This circumstance is indicative, I presume, of a tolerably healthy state of the lining membrane. Usually, however, the discharges are not only copious and frequent, especially where the tumour is situated above the cervix, but freely coagulate; and yet the tumour may lead to the termination of life, unaccompanied by discharges of any kind, even leucorrhœal. It has occurred to me, repeatedly, to observe the absence of the catamenia synchronizing with the first sensible effect of the fibrous tumour, an attack of hæmorrhage taking place after the lapse of a few weeks. This, in three instances, was accompanied by the expulsion of a large membrane, like the deciduous membrane of pregnancy; in two other instances, by a painful enlargement of the glandulæ Nabothi; and in all of them it was erroneously believed that abortion had happened. It is a well known fact, that fibrous tumours undergo a decided increase just before each menstrual period, a free discharge having also the effect of greatly relieving pain. Not, however, that the hæmorrhage invariably produces relief, for the discharge may fail to find a ready outlet. A large-sized tumour, for instance, may materially encroach upon the uterine cavity, occasioning a change both in its size and shape. It becomes crooked, and deep enough to contain a considerable quantity of blood; its retention is, moreover, favoured by the narrowness of the neck, and in persons who have not borne children, by the small size of the orifice. The contractile powers of the womb are also defective, and the escape of the blood is rendered still more difficult; until, at length, the mass is expelled, and often in a decomposed state. A difficulty may, however, occur, as in the instances I will now mention to you. The first was a case of supposed pregnancy; the cervix uteri was distended by a tumour, like the ovum about the tenth week, and the uterus had ceased to make efforts for its expulsion. The mass was suffered to remain some days in this situation, and was then removed artificially; it proved to be merely solidified blood. In the other case, I extracted a real ovum from a similar situation, where it had been detained for two or three days; the ovum was confined by a fibrous tumour, situated within the walls of the cervix uteri, on its posterior side, and the pressure made upon the anterior part of the neck interrupted its circulation, and occasioned a large œdematous swelling, almost equal in size to the ovum itself, while the draining had gone on to a somewhat alarming extent. The size which the cavity of the womb may acquire, in diseases of the organ, is well displayed in the preparation now before you; it is a large fibro-cartilaginous growth, and a pound and a half of blood was actually removed from the cavity of the uterus after death. The lining mem-

* Death has even been produced by injuries to the viscera, interposed between the enlargement and the abdominal walls.

brane had the colour of vermilion, and was studded with small points, and a fungoid excrescence at the fundus occasioned hæmorrhage, under which the patient sank. Here is another similar preparation, which also shows the size, depth, and irregularity of the cavity. You may, perhaps, suppose that the fibrous tumour will lead to bad consequences on the final cessation of the catamenia, but such is not generally the case, for although the function affords relief to the periodical congestion, the congestion itself will cease on this period arriving, and, consequently, the tumour is likely to undergo a favourable change. The continuance or cessation of the catamenia will, it is true, depend very much upon the size and relative situation of the tumour. The lining membrane undergoes but little change from a tumour which is confined within the structures of the neck of the uterus. If it be large and connected with the body and fundus uteri, the lining membrane will, probably, have acquired increased thickness and vascularity, occasioning frequent hæmorrhage, and watery discharge. The presence of a tumour is also attended with *difficult* menstruation; and the discharge is scanty, accompanied, sometimes, by the expulsion of portions of fibrine, without colour, or by a well-formed membrane of coagulable lymph. This deciduous-like membrane is formed in the interval between the monthly periods, consequently the uterus is always more or less enlarged, and its mucous membrane preternaturally vascular. Severe disturbance in the nervous system usually ensues. This form of painful menstruation can very generally be traced to the effect of pregnancy over a fibrous growth, previously small, and in a dormant state. Whenever this painful menstruation arises for the first time after delivery, the condition of the womb should be most carefully ascertained. I have already remarked, that the discharge is scanty. The portions of lymph are usually small, varying from the size of a pin's head to that of a finger-nail. Here, however, is a specimen of extraordinary size, three inches at least in circumference. The cavity of the uterus must have undergone enlargement, for the lady has passed nearly thirty periods of similar suffering. Lately the mucous membrane of the bowels has taken on a similar diseased action. The excitement of the uterine membrane is rarely, I believe, associated with the larger kinds of fibrous growths.

In derangements of this nature a free discharge is productive of great relief, and I have repeatedly noticed that there are two distinct periods of suffering. The first is attended with the usual slight discharge, and lasts two or three days, at which time the period appears to have terminated; but after the lapse of a short interval, varying from a few hours to a few days, an extreme state of suffering arises, exceeding the first period in severity, and unattended or nearly so by discharge. This also continues two or three days, and then disappears. The effects upon the lining membrane of the womb are very marked, pain and the formation of membrane being the chief. Instances of the connection here spoken of have repeatedly come before me, and in all of them the pre-existence of the fibrous tumour could be clearly proved. In the larger tumours, instead of the formations of lymph, the lining membrane not unfrequently secretes a white mucous kind of fluid, of which I shall presently speak. Sometimes again the secretion is of a purely serous character; and then, after a time, œdematous swellings arise, the appetite fails, the complexion assumes a sallow hue, in fact, a confirmed state of anæmia ensues. Inflammation of the mucous membrane of the bowels is not unlikely to succeed an obstinate inflammation of the lining membrane of the womb, and I have repeatedly witnessed it. I would, however, only be understood to say, that this morbid condition of the intestines is frequently associated with pre-existing uterine disorder; the derangement of the nervous system generally, and of the spine in particular, being kept practically in our view. There are two distinct kinds of uterine enlargement, which must be distinguished from each other, viz. fibrous tumour having an encysted structure, and general hypertrophy with induration of the proper tissue of the organ. If the development of the tumour have been partial, if its surface be nodulated, defined, tender, and possess firmness, the presumption will be in favour of its fibrous character, and it is probable that other similar tumours will be in course of development. The more general enlargements of the womb appear to consist of mere hypertrophy of the uterine parenchyma. We often see this in the cervix uteri especially, the posterior or anterior surface being perhaps quite disproportionate in length and thickness to the contrary side. Time alone will enable you to ascertain correctly the nature of a large and firm tumour of the uterus. Mere congestion of the organ, consequent upon suppressed menstruation, will occasion a considerable amount of enlargement; but this possesses none of the firmness of the fibrous degeneration, and differs from this disease in its history. The enlargement, moreover, yields in a remarkably rapid manner to a return of healthy menstruation. There is also a form of enlargement, comprising a thick, moderately soft and uniform swelling, occupying the interior of the cervix generally, limited to the mucous and submucous tissues, and sometimes occasioned by the obstruction which a fibrous growth offers to the free return of blood. An in-

flamed state of the glandula Nabothi is usually attended with considerable swelling, hardness, pain, and irregularity of the interior of the cervix, and may be easily distinguished by the finger from other morbid states of this portion of the organ. It is usually attended by more or less hæmorrhage, or other discharges, and the os uteri will probably not occupy the centre of the swelling.

It is also very possible to confound small-sized fibrous growths with displacements of parts—I allude to a peculiar displacement of the womb comprising a curvature of the superior part of the cervix, having its convex surface towards the sacrum. Such a mistake, however, will not be likely to arise, if we recollect the characters of the small fibrous tumour, and connect our knowledge of these with the history of the case. A displacement, having some little resemblance to retroversion of the womb, may also occur in connection with a fibrous tumour, the orifice being forced upwards and forwards. It varies, however, from retroversion, in the enlargement occupying the cervix uteri on its posterior side, as it must always do under these circumstances.

The changes which the fibrous tumour may undergo, are for the most part the following:—

1st. The tumour may disappear by a process of absorption.

2nd. It may continue enlarging to a certain extent and then remain stationary, and calcareous matter may be deposited in different parts of it.

3rd. It may disappear by a long continued discharge, unconnected with a suppurative process.

4th. It may undergo repeated attacks of acute inflammation in different parts of its substance, implicating perhaps its entire structure, and terminating in mere softening or in suppuration; but the suppurative process is usually very imperfect.

5th. It may ultimately change its situation relatively to the part where it was originally developed, and project into the cavity of the womb; even through the os internum, so as to admit of removal by ligature; and if the operation be neglected, it may spontaneously slough away.*

* A large-sized fibrous tumour, recently cast off by sloughing from the uterus of a middle-aged unmarried lady, was shown to me a few days ago. Two years previously I had an opportunity of visiting this lady on account of a tumour, supposed to be an enlarged ovary, and which occupied the hypogastrium. I made the following remark in my note-book:—"A solid enlargement of the uterus, resembling in figure the gravid uterus at the fourth or fifth month. There is great hæmorrhage at the monthly periods; the countenance is sallow, and the symptoms are those of anæmia. The disease has continued six years." I recollect that one or both legs were œdematous from the pressure of the tumour, and that the os uteri was exceedingly small. At this time, therefore, the case did not warrant a presumption that it would terminate in the way I have mentioned, and no other opportunity of renewing the examination was afforded me. A truly interesting and almost parallel case will be found in my work on obstetric medicine, p. 165. The disease had existed several years, and was removed by ligature. The patient has been in good health ever since. It is a singular fact, that a hard fibrous tumour, inflaming from time to time, and producing the severest constitutional distress, may be confined within the walls of the womb, perhaps partially occupying the cavity of the organ for so many years, and at length make its way through the uterine orifice, and admit of removal by ligature, just as a common polypus does, or even slough away, and allow of the patient's recovery.

PATHOLOGICAL CONTRIBUTIONS.

BY WM. MUNK, M.D.,

Physician to the Tower Hamlets Dispensary.

ON THE USE OF SULPHUR IN SOME SPASMODIC AFFECTIONS, PARTICULARLY ANGINA PECTORIS.

EARLY in the month of December, 1837, I was requested to visit Mr. S., a gentleman, æt. 62, of full habit of body, with short neck, and full, florid complexion. The circumstance inducing him, at this time, to seek advice was, the occurrence, in a more than ordinarily severe degree, of piles, to which he had, for many years, been subject. The skin was hot, pulse full and firm, tongue whitish; he complained of thirst and of pain about the head, symptoms which were speedily relieved by the application of leeches to the anus, the use of castor-oil as an aperient, and the employment, three or four times daily, of a common effervescing draught with nitrate of potass and tartar emetic.

Towards the termination of my attendance, he had a severe paroxysm of angina pectoris, to attacks of which he had been more or less subject for five or six years. At first they occurred only at long intervals, and could then, in all cases, be attributed to more or less violent exertion. Of late, however, the intervals had become less, and the paroxysms were now excited by much slighter causes, that which I witnessed having owed its origin to a fit of anger shortly after a pretty full dinner. For this complaint he had been under the care of many different practitioners, in town as well as country, without receiving, however, any benefit, so

that he had now come to the determination of employing no remedial means save during the paroxysms, when, by the advice of Dr. Walshman, his former medical attendant, hot water was applied to the præcordia, so as to induce vesication; and he took at intervals a mixture containing laudanum, Hoffman's anodyne liquor, and camphor. Upon taking leave of him, I recommended that the bowels, which were generally slow, should be maintained in a free state by sulphur. Some months after this, when in attendance upon a member of his family, I inquired concerning the attacks, and was informed that there had been no return of them. He had also remained free from hæmorrhoids, and had kept the bowels greatly relaxed by sulphur, a drachm of which in milk he swallowed every night on going to rest. Himself, however, and the other inmates of the house, complained greatly of the disagreeable odour of his perspiration, and were anxious to have some other laxative in the place of sulphur. The confection of cassia was, therefore, substituted for it. Six weeks after this he had a severe attack of angina, another in about a month, and again, for a third time, after an interval of seven weeks. Attributing the relapse to the electuary, he of himself again had recourse to sulphur. The bowels were kept by it, rather more open than by the cassia; and, for a considerable period, he continued free from the paroxysms. In the autumn of 1838, owing to the heat of the weather, and the consequent increase in his perspiration and its disagreeable concomitant, the sulphureous odour, he once more discontinued its employment, taking now, in its stead, small quantities of castor-oil, or of the compound rhubarb powder of the Edinburgh Pharmacopœia. Again did the paroxysms return, and, for a third time, did they cease with a recurrence to the employment of sulphur. This medicine he continued during the whole of the winter, without any return of the complaint. In May, 1839, he experienced a very slight paroxysm, although then taking the sulphur as usual; since which he has remained in perfect health, with the exception of an occasional return of hæmorrhoids. I have, upon two occasions, examined the chest; but have never been able to detect any bruit or abnormal sound. The impulse was, if anything, a little feeble, and the first sound somewhat louder, clearer, and more abrupt than natural — phenomena which would seem to indicate some slight degree of thinning of the heart's parietes.

Some time elapsed before I could arrive at any thing approaching to a satisfactory solution of the relief experienced, at first I attributed it to the lax condition in which the bowels had been kept; yet this supposition could scarcely be correct, inasmuch as other medicines, equally efficient as gentle laxatives, produced no such result. After a time, however, the connection between the particular laxative sulphur and the absence of the paroxysms became so evident, that it could scarcely be doubted but that they stood in the relation of cause and of effect. Still did the modus operandi of the drug remain in obscurity, and whilst yet doubting on the subject, the following passage in Dr. Chapman's "Elements of Therapeutics," vol. i., p. 354, met my eye:—"To prevent or remove those painful spasmodic contractions of the muscles, denominated cramps, sulphur is much resorted to, and generally it is advised to grasp a roll of brimstone during the paroxysm. How far the popular expedient is salutary, I cannot pretend to say, though I have done good in numerous instances, by recommending pads of sulphur to be borne on the part prone to such attacks, while the medicine is taken internally. I once had under my care a man who, for years, had been subject to cramp of the abdominal muscles, recurring several times in the day, and so violently as to draw him double, attended with a degree of pain scarcely to be endured. Having tried almost every other measure, I suggested the use of the pad, which always prevented or relieved an attack; but, on taking it off, the cramps speedily returned. By wearing it, however, for some weeks steadily, he was ultimately cured."

Now it seemed probable, that to this effect of sulphur, the greater part, if not the whole, of the benefit which Mr. S. experienced whilst taking it, might be legitimately referred. Not wishing, however, to jump at a conclusion from the result of a single case, I determined upon making trial of the same medicine, should another case of the disease fall under my observation. A considerable time elapsed before I had an opportunity of so doing; but in the interval I employed sulphur with marked benefit in cases of cramp of the extremities, according to the mode recommended by Dr. Chapman, that is to say, by keeping the powder of the substance in contact with the surface. In three cases of spasm of the alimentary canal it was manifestly beneficial. One of these occurred in a lady, æt. 24, of highly nervous temperament, residing at Chelsea, who was frequently the subject of frightful attacks of what is commonly termed "cramp of the stomach." She was quickly relieved by the employment of this medicine, and by a continuance thereof, in divided doses, for some two or three months, appeared to have quite overcome the tendency thereto. In March, 1839, owing to an error in diet, she experienced a slight attack, which, however, quickly subsided, and since then there has been not the least return. She now takes, for a week or ten days together, at intervals of a month or six weeks, fifteen grains of washed sulphur three times daily.

Having thus proved experimentally the

accuracy of Dr. Chapman's statement as to the power of sulphur in these cases, I became the more anxious to test its effects in angina pectoris, a disease which, I believe, depends upon an analogous condition of the nervous and muscular structures of the heart.

That spasm or cramp of the heart is the proximate cause of the symptoms constituting the paroxysm was the opinion of Dr. Heberden, to whom we are indebted for the first description of the disease, and for the name it now bears. "What the particular mischief is," says he, "which is referred to these different parts of the sternum, it is not easy to guess, and I have had no opportunity of knowing with certainty. *It may be a strong cramp*, or an ulcer, or both. The opinion of its being a convulsion of the part affected will readily present itself to any one who considers the sudden manner of its coming on and going off, the long intervals of perfect ease, the relief afforded by wine and spirituous cordials, the influence which passionate affections of the mind have over it; the ease which comes from varying the posture of the head and shoulders, by straightening the vertebræ of the thorax, or by bending them a little backwards and forwards; the number of years which it will continue without otherwise disordering the health; its generally bearing so well the motion of a horse or carriage, which circumstance often distinguishes spasmodic pains from those which arise from ulcers; and, lastly, its coming on in certain patients at night, and just after the first sleep, at which time the incubus, convulsive asthmas, numbnesses, epilepsies, hypochondriac languors, and other ills, justly attributed to the disturbed functions of the nerves, are particularly apt to return or to be aggravated."

Similar to this is the view entertained by Dr. Forbes, the author of the article on this disease in the "Cyclopædia of Practical Medicine," beyond comparison the most learned and judicious treatise on the subject to be met with in this or any other language. "Of the intimate nature of the pain in the paroxysm of angina we know nothing; but we know no more of the nature of any pain. All that we can propound concerning it is, a relation of the events which seem to lead to it, and the condition of the parts in which it occurs; at the time of its occurrence we know that the pain is not of that kind which arises from inflammation or ulceration, or any other fixed physical alteration of the part. All the circumstances attending it *prove it to be of that kind which occurs in cramp or spasm*, or from pressure, or in the class of cases termed neuralgic, in which the painful sensation is the result of some unknown temporary condition of the nerves of the heart, not manifested by any physical alteration of them discoverable by our senses."

Mr. H. E., æt. 59, came under my care in January, 1839. His complaints were all referred to the region of the heart, and consisted of occasional attacks of severe pain, and urgent oppression in that part, conjoined with numbness and pain in both arms, worst in the left, but in neither extending below the elbow. The action of the heart was irregular and indistinct; the pulse at the wrist, for some seconds together, imperceptible; the breathing very much oppressed, every muscle subservient to the act being called into play. It was during such a paroxysm that I first visited him. To attacks of this nature he had for some years been more or less subject; they were, in most cases, induced by exertion, but in some instances occurred at night, without any very evident cause, immediately after falling asleep, from which they awoke him with a feeling of impending dissolution, and were then always more violent and of longer continuance than when occurring during the day. The extreme severity of the paroxysms was not of long continuance; they soon diminished in intensity, giving way to a feeling of soreness, and, as it were, of a heavy weight suspended far within the chest. The present attack quickly subsided; but there remained a good deal of disorder about the abdominal viscera; the tongue was thickly coated at its back part with a yellowish mucus; he complained of thirst, loss of appetite, a feeling of fulness and of weight in the belly; the urine was scanty and high-coloured; the alvine evacuations unhealthy, and the skin hot. He had eight leeches applied to the anus, took small doses of blue pill and ipecacuanha at night, and during the day a saline aperient mixture. A fortnight sufficed to bring him back to his usual standard of health, when he was ordered to take, night and morning, half a drachm of washed sulphur in the form of electuary. This he continued taking regularly to June, and had, during that time, no return of the paroxysms. He then went with his family into the north of England, and, having left the prescription behind, thought to do without the medicine until he returned. In August he had a slight attack of his old complaint, and then immediately sent to town for the formula. This was forwarded, and he recommenced the use of sulphur, a week after which he had another attack. This was brought on by walking rather briskly, to avoid a shower of rain, up one of the Cumberland hills. From that time to the present (June 16, 1840,) he has continued free from the paroxysms, once or twice, however, having experienced what he conceived to be premonitory symptoms of an attack. These have, upon each occasion, been removed by a full dose of opium and James's powder, the pediluvium and a sharp liniment to the chest.

The cases above related constitute the

amount of my experience upon this matter—an experience, indeed, so exceedingly limited, that it may possibly be thought by many insufficient to justify me in now laying them before the public. As angina is, however, a somewhat rare disease, and it is certain that some considerable time must elapse before I could, from my own practice, gather such an amount of cases as would enable me to fix the positive utility of sulphur in this disease, it seemed to me best to give a statement of the facts and reasoning which had led to its employment, and thus (should they appear to others sufficient to justify a further trial) to pave the way to a more speedy decision of the question, at the same time that I lay myself open to correction, if in error, or to a confirmation of my views, if correct.

Although I cannot, then, from such scanty materials, attempt to deduce any conclusion as to the class of cases in which sulphur may possibly be useful, I have yet seen so much of the indiscriminate manner in which new medicines, or even well-established remedies, when given in a new direction, are employed, that it may not be useless here to point out the forms of the disease, in which the beneficial effects of sulphur may, reasoning *à priori*, legitimately be expected.

We know that angina pectoris is found associated with two very opposite conditions of the organ in which the disease is seated—the heart. In one, this viscus or the parts closely connected therewith present great structural disease; whilst in the other, such a condition is altogether wanting, or exists only in so slight a degree as scarcely to merit consideration. In the former of these we have a permanent and, in the generality of cases, incurable state of the parts, strongly predisposing the organ to paroxysmal attacks. Palliation is here all that can be expected from medicine—a cure being beyond the reach of art. Such cases then are but little adapted for tests as to the power of any medicine; although even here, as we hope to render probable in the sequel, sulphur may, perchance, be beneficial. It is then on functional angina that, in an experimental investigation, we must chiefly rely.

But even here some circumstances must be considered, and in many instances certain forms of treatment premised. Dr. Forbes has clearly shown that the condition of the general system varies much in individual cases: that in one we may have plethora; in another, anæmia; in a third, little else than that condition of the nervous system by Cullen, named, mobility. Now in each of these it is necessary, as far as possible, to overcome the general morbid condition, before having recourse to sulphur. In one we employ blood-letting evacuants and a low diet; in another, give stimulants, tonics, especially steel, and abundant nourishment; whilst in a third, there must be added antispasmodics, anodynes, the cold bath, &c. Having thus brought the system, as nearly as may be, to its healthy state, the case becomes much simplified, and the anginous paroxysms are even occasionally removed by the very treatment required by the general system. In the greater number of cases, however much the general health may have been improved, the paroxysms still occasionally return. In such a case the trial of sulphur would undoubtedly be indicated, and from its use I should anticipate the best results. There remains here some peculiar condition of the nervous and muscular structures tending constantly, upon slight causes, to that irregular and painful state termed cramp or spasm. It is to obviate this that sulphur has so long been popularly employed.

In organic angina, where fixed disease is among the remote causes of the paroxysms, this medicine may, perchance, be advantageous. By its use we may lessen the tendency of the parts to this irregular action; and having done so, the organic affection, which was before all powerful, may, by the diminution of a morbid irritability, be little, if at all felt, and may thus be wholly inoperative as a cause of the paroxysms. In the case of organic disease, however, to use the words of Dr. Forbes, our expectations of benefit from treatment, and the actual results, become wonderfully less. Now, indeed, we fight not for victory, but merely to keep the enemy at bay. We, however, use the same weapons, and if we do not strive with the same enthusiasm, we must, at least, be vigilant and active; and we shall often be rewarded, with a degree of success that we scarcely dared to hope for at the commencement of our treatment.

Of the inconveniences attending the use of sulphur, there are two to which I shall briefly allude. The first of these is the disagreeable odour of the perspiration, whilst under its influence. This cannot, I believe, be obviated, or diminished, by any pharmaceutical process to which it can be subjected. It may, however, be much diminished, by avoiding all circumstances which tend to the increase of perspiration. The patient should be kept cool, should pass much of his time in the open air, yet in no case should he carry exercise to the extent either of heating the body or of producing fatigue; and if he wear flannel, the interposition of a very fine linen garment between it and the skin, will materially aid the measures just enumerated. The other effects of sulphur which I have now to notice, are the griping pains which occasionally attend its employment. Whether these be owing to the presence of arsenic, as has by some been supposed, or to the acid which, when carelessly prepared, it almost invariably contains, I am unable to say. The latter seems to me

the most probable, for the combination therewith of an alkali or alkaline salt, as magnesia, carbonate of soda, ammonia, &c., will very generally suffice for its correction. In other cases, the addition of a small quantity of cubebs to each dose, will prove a more efficient corrigent than any other means with which I am acquainted.

2, Finsbury-place South,
June 22, 1840.

REMARKABLE FŒTAL MALFORMATION.

By GEORGE ARNISON, *Esq., Surgeon, Stanhope, Durham.*

On the evening of the 22nd of May last, I was summoned to the High-house, in Stanhope Park (the property of C. Rippon, Esq., M.P.), a few miles distant, to assist the wife of Wm. Wearmouth, a lead-ore carrier, in labour with her second child. The pains, which had been harassing throughout the day, were, on my arrival, at about 8 P.M., strong and frequent, the os uteri was considerably dilated, and the breech presenting at the brim; but, from its elevated situation, and the tense state of the protruding membranes, which I was afraid of prematurely rupturing, I was at first not entirely free from doubts upon the subject. The impressions I had formed were, however, soon confirmed by the discharge of the liquor amnii, and the entrance of the breech into the pelvis, which presented some strange anomaly in its form.

Under the increased impulse of uterine action which succeeded, the breech slowly descended, and after three hours' severe labour was ultimately expelled, in the most favourable position. The feet were gradually brought down, and under ordinary circumstances I should have anticipated the speedy completion of the labour; but its further progress was now arrested by the occurrence, as I believed, of some unusual obstacle at the brim, which resisted all the force I could prudently exert to aid the urgent and increasing efforts of the mother. On this account, about 1 A.M., soon after the protrusion of the breech, I declined a call to another case of labour at East Gate, five miles distant, considering the period of my release as very uncertain. Serious difficulty not usually occurring at this stage of labour, and aware of some peculiarity about the breech, I discovered, on more minutely examining the child, that there were two ani, about an inch apart, one on each side of the ordinary situation; and about an inch beyond this, near the apex of the sacrum, a rudimentary structure, nearly an inch long, and of the thickness of a goose quill, resembling a penis, but without prepuce, glans, or urethra. From the ossa coccygis surmounting each anus, I readily traced with my finger the spinous processes of two distinct vertebral columns, three inches apart, with an intermediate, though less prominent, chain of osseous protuberances, extending upwards, as far as I could reach, which was not beyond the centre of the dorsal region, the immense body of the child completely occupying the vagina and pelvic cavity.

This discovery, conjoined with the former tardiness and present arrest of the progress of the labour, notwithstanding the activity of the *vis uteri*, and the ample dimensions of the pelvis (of which I was convinced, from attending her in her former labours), induced me to believe that the fœtus had two heads, or some extraordinary malformation of the part engaged at the brim; and that in all probability the chest would require to be eviscerated, and one of the heads (for I was strongly persuaded there were two) either perforated or decollated, before delivery could be accomplished. Having had a case of embryotomy in this immediate neighbourhood, 16 months ago, though a most successful one, at which the two females, who were my only attendants on this occasion, had been present, I was desirous of obtaining the sanction of another practitioner, before again resorting to measures of this extreme nature, who might share the responsibility of a case which I had reason to apprehend would be attended with no little difficulty, and, probably, some degree of danger. On communicating my sentiments, my wishes were immediately responded to, and the husband was dispatched to St. John's Chapel, eight miles distant, for the nearest practitioner; the brother was, at the same time, 2 A.M., sent to my house for my obstetric instruments.

No dangerous symptoms having yet supervened, and, assured that the poor sufferer was sustaining no injury, although she protested she was dying, I sat, dosing at intervals, by the fireside, until about four o'clock, when the messenger returned with my instruments. With the aid of the blunt hook I succeeded, without difficulty, in bringing down the arms, and my attendants began to be in better spirits, but I felt only the more confirmed in the opinion I had previously formed, for scarcely any appreciable advance of the child ensued in consequence. Pulsation of the funis, which was active on the first descent of the breech, having long ceased, I tied and divided it, and relaxed the placental extremity, supposing it possible for the birth of the child to be retarded by being coiled around its neck. No advantage resulting from this, and finding all my efforts by traction unavailing, and the constitutional symptoms exciting no immediate alarm, I thought it better to await the arrival of the medical gentleman, now momentarily expected, and again desisted, al-

though the poor woman was tossing to and fro under the intensity of her sufferings, and earnestly entreating me to cut away the child, or release her by any means in my power.

After a patient endurance of this state of matters for another hour, and no professional aid arriving, the pains continuing violent, and with little intermission, I was induced to yield to her entreaties, and try, if possible, to assist her; when after a cautious, though rather forcible and persevering traction in the axis of the brim, for about 15 minutes, simultaneously with the efforts of the mother, which were powerfully detrusive, the difficulty was suddenly surmounted, and the remainder of the child, from the umbilicus upwards, projected beyond the os externum. The patient was now tranquil, free from pain and hæmorrhage, the pulse being moderately firm, about 90, a number which, throughout her labour, it had never much exceeded; though the uterine tumour which had, in some degree, contracted, was exquisitely tender, and considerable exhaustion was necessarily experienced. Immediately I administered a dose of half a drachm of powdered ergot, with the view of accelerating the contraction of the uterus, and thereby detaching the placenta, and preventing hæmorrhage, from which she had suffered to an alarming extent in her former labour.

About half an hour after this, I was joined by a professional friend, Mr. Helmer, of Chapel; the effect of the ergot was now becoming manifest, and the placenta (which, with the funis, was single) was soon afterwards expelled, and the delivery happily terminated. Having carefully examined the lusus naturæ, and ascertained the state of the patient to be favourable, we took our departure about an hour afterwards (7 A.M.), having previously administered a full dose of tincture of opium. At 8 P.M., she had remained free from pain and hæmorrhage; pulse 80, soft; there was no abdominal tenderness, excepting over the uterine tumour, which was firmly contracted at the pubes, and extremely sensitive. Exhaustion being a prominent feature in her condition, I gave her a pill, containing two grains of opium, and enjoined the strictest rest and quietude, and immediate information to be forwarded to me, in the event of any unfavourable change.

May 24. Learnt she had slept soundly during the night, had a tolerable appetite, had made water without difficulty; remained free from pain and fever, and was doing well.

25. Found the tongue clean, the skin moist, lochia natural, pulse rather excitable, varying from 86 to 96, and slight pains experienced at intervals in the hypogastrium. An enema of decoction of barley with castor oil, ℥ss, was administered, and retained during my stay, and a similar dose of the oil ordered to be given, by the mouth, if required.

27. Hearing nothing of my patient yesterday, I visited her this morning, and found that the oil had operated freely on the 25th, and that she had enjoyed a refreshing sleep the succeeding night without an opiate; the bowels not having acted since, and the mammæ being indurated and painful, they were ordered to be partially drawn, another dose of castor oil administered, and liquids to be abstained from; the tongue continued clean and moist; pulse 92 to 96, a little firmer; the patient expressing a desire to be allowed to sit up a while, feeling herself stronger, and having less pain, being able to turn over in bed without much inconvenience.

30. Strength and appetite improving; had been dressed and sitting up prior to my visit; tumefaction of the mammæ subsiding.

June 3. Found her sitting by the fireside, knitting stockings, and free from complaint.

I have not visited her since, but have been informed that her health is perfectly re-established.

In addition to the peculiarities of the child already described, the two spinal columns, traced upwards from each anus, as I had inferred some hours before its birth, gave support to two perfectly formed and nearly average-sized fœtal heads, naturally situated, with the right ear of the one to the left of the other. The crania were as firm as usual at the natural period of birth, and the scalps plentifully covered with long, dark hair. The occipito-frontal circumference of each head singly measured 13 inches, of the two together 19 inches; whilst the vertico-submaxillary circumference of each was 15 inches, and of both conjointly 20 inches. A line passed around the chest, arms, and back, measured 16½ inches: the anterior aspect of the child, as high as the sterno-clavicular region, presented no deviation from what is natural, the thorax, shoulders, arms, abdomen, genitals (which were those of a male), and lower extremities, being perfectly normal; but to the upper part of the sternum there was articulated a third clavicle, which, stretched across from before backwards, midway between the two necks, which here issued from the trunk. The other extremity of this additional and nearly straight clavicle, was attached to a sort of double-shaped scapula, situated on the upper and central part of the thorax posteriorly, and surmounting a chain of osseous projections, which extended upward from the pelvis, in the median line. This chain was about an inch distant from each proper spinal column, and gave support to the converging extremities of the minute ribs arising from them. To this scapula was articulated a third or rudimentary arm, the forearm of which contained but one bone,

and was permanently flexed upon the arm by the adhesion of the adjacent integuments, and terminated in a solitary well-formed finger, lying near the shoulder, whilst the elbow arose perpendicularly to a level with the vertices; the triangular space between the heads posteriorly being thus occupied by this unique extremity. The two ani communicated with each other, opening into a rectum common to them both, and in all probability the intestinal canal, stomach, and viscera generally, were single, excepting, of course, the œsophagus, trachea, &c., which were necessarily double. The entire length of the child's body was upwards of 20 inches, and weighed nearly 10lbs. avoirdupois.

The mother had attained the full period of uterine gestation, during which she had not suffered materially in her health, nor had her attention been attracted to her state by anything unusual. At the period of conception, whilst setting out on a journey from home with her own child and that of a relative, she was greatly affrighted by the horse and cart which conveyed the children being very nearly precipitated over a rude bridge, leading across a rivulet upon the moor; the horse turning abruptly, stumbled, and fell astride upon the low parapet of the bridge, and from the injury it received, and the alarm and agitation of the mother, who was walking at a short distance behind, they were obliged to suspend their journey, and return home. What influence this occurrence exerted upon the economy of the mother, in the production of the phenomenon to which she gave birth, or whether it exerted any, I leave for the curious in such matters to determine, merely remarking that this is the only circumstance to which she can refer, as having powerfully affected her during her conception or subsequent pregnancy.

ON THE

PREVALENCE OF NERVOUS DISEASES.—ARREST OF THE URINE.

By T. Laycock, *Esq., Surgeon, York.*

I have been hoping to see some notice in our medical journals of the diseases of the nervous system, which are so prevalent at this moment. Although nothing of the kind has been mentioned, yet I cannot think I am singular in the opinion, that paralysis and apoplexy are so unusually frequent as to deserve the epithet of epidemic.

I have heard of several cases of this kind occurring in the practice of my medical friends, and within the last three weeks no fewer than seven cases have come under my own observation. I am curious to know whether my medical brethren have observed these diseases to be more frequent than usual at this time. I have heard several people remark on the frequency of "fits" lately. They say that they are almost as common as the scarlet fever.

Upon inquiry, in all the cases mentioned (excepting in one, hemiplegia with apoplexy, which was fatal, and in which the patient could not answer inquiries,) I found that the urinary secretion was very much diminished previously to the attack. In two of the cases (hemiplegia) scarcely three ounces of urine were secreted in the course of twenty-four hours. These were, and are, still relieved by diuretics. In three cases, in which there were the premonitory symptoms, diuretics were equally useful. In two, the symptoms which were removed altogether by the use of the remedies, recurred so soon as these were suspended and the renal secretion diminished in quantity; and were again removed altogether by restoring the functions of the kidneys. My attention was more particularly directed to the kidneys, from observing the great frequency with which those organs were affected in the present scarlet-fever epidemic, and have been for several months past. I have also noticed, in common with some of my professional friends, that children have been attacked by the dropsy, consequent on the renal disease, which is the sequel of scarlatina, without having had any *apparent* attack of the fever. Now, Dr. Bright, and others (as Dr. Addison), who have followed up his views, have distinctly shown, that renal affections may, and often do, induce cerebral disease, as coma, convulsions, apoplexy, &c., and it struck me, that the greater frequency of these affections just now, might originate in a *masked attack of the scarlet-fever epidemic attacking the kidneys.* This might have no effect on the encephalon of individuals in tolerable health; but those having incipient chronic disease of either the brain or kidneys, or a predisposition to diseases of the nervous system, might suffer in the way just mentioned. I am not anxious to recommend, that we should all become exclusively "water-doctors." I am sure, however, that it could not but be beneficial to practice, if practitioners were to examine into the morbid changes of the urine.—*Abridged from the Dub. Med. Press,* July 1.

A HINT TO THE THOUGHTFUL.

"In reading authors, when you find,
Bright passages that strike the mind,
And which, perhaps, you have reason
To think on at another season;
Be not contented with the sight,
But take them down in black and white."*

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* John Byrom.

THE CAUSES AND TREATMENT OF STRABISMUS, OR SQUINTING.

SUMMARY OF 76 OPERATIONS BY MR. LISTON.

SIR:—Since the publication of some remarks on the subject of division of the muscles of the orbit in a late Number of your Journal, I have assisted at seventy-six operations of this nature, performed by Mr. Liston, the results of which may prove interesting to some of your readers. I am, Sir, your obedient servant,

W. R. ANCRAM.

London, July 14, 1840.

The causes of contraction of the muscles of the orbit appear in several instances to be similar to those which produce shortening of other muscles of the body, and induce deformity in the extremities, as in club-foot, contraction of the hamstring muscles, &c., being dependent on direct or indirect injury or irritation of the nervous system. Under this head may be placed twenty-one of the cases which have been operated on; three being produced by direct injury to the brain, thirteen by the convulsions to which children are liable in early life, and nine by the irritation of the diseases of early childhood, small-pox, measles, and scarlatina. Habit is another rather frequent cause; the eye has been affected by some disease; in the anxiety to avoid the light it has been turned inwards, and permanent strabismus has been the consequence; or a shade has been worn over the eye, the light has been admitted only at the inner angle, and to this point the eye has been constantly directed; ten patients date their deformity from this occurrence. Only four persons have presented themselves who suffered, from their attempts to imitate their squinting companions, by permanent strabismus. Violent exertion, as in hooping-cough, occasioned the disease in five patients; and the action of the muscles of the eye, in looking suddenly at some object, caused a permanent contraction in seven others. Four cases were occasioned by falls. The relative proportion of congenital strabismus is small. I have found only eight who say they were born with the deformity, and in four cases I think that was rather doubtful. From my inquiries into the causes of strabismus, I should say that a far greater number of cases was occasioned by spasmodic contraction of the internal rectus, than by paralysis of the external straight muscle. In a few cases I omitted to inquire the cause of the deformity.

The contraction of the recti muscles varies in different individuals, from the slightest cast, with perfect power of motion, to almost complete immobility and partial concealment of the cornea in the inner angle of the eye. The cornea is most generally drawn simply inwards; in some cases downwards as well as inwards; more rarely upwards and inwards; of course, by the combined action of two muscles. Two patients have also presented themselves where the eye was drawn directly outwards, evidently by a contraction of the external rectus. Both those individuals have been prevented by circumstances from submitting to the division of the abductor as yet; but it is proposed to perform the operation in the course of a few weeks. In a third case the external rectus has been divided, with the same success that attends the more common operation; it presented no greater difficulties than the division of the internal muscle. A most general effect of these changes is diminished power of sight, and this diminution increases in the ratio of the withdrawal and fixation of the cornea from the axis of vision.

The causes which produce strabismus being usually the diseases of early childhood, that is the age at which the affection most commonly comes on. In the greater number of cases the disease has begun previously to the third year, and after that time the liability to the affection appears to decrease with the age. After puberty it is exceedingly rare. Of the fifty-three cases I have examined, one only occurred at the age of fifteen, and one at twenty-five; in the latter case, the strabismus was occasioned by direct injury to the head. As far as I can judge, both sexes are equally liable to this deformity; forty females and thirty-six males having submitted to the operation. The disease does not appear to attack one eye in preference to the other, nearly an equal number of right and left eyes having been operated upon. One case has been treated where both eyes were affected. Age is no bar to the performance or success of the operation. Patients of all ages, from four to sixty-two, have been treated for this affection. A contracted internal rectus, of sixty years' standing, is the most confirmed case in which I have seen this operation performed, it succeeded perfectly. In very young children it would hardly be advisable to attempt the operation when the strabismus was only of few months' duration. The displacement of the eye might depend on some disease of the brain or intestinal canal, which, by attention to the general health, might be removed, and the squint cured without resort to the more violent remedy of division of the muscle.

With respect to the operation, the safest way to secure its complete performance, is to dissect, perfectly clean, the internal part of the ball of the eye, for the slightest fibre of the internal muscle that remains

undivided will prevent eventual success. In some instances, after the internal rectus has been cut across, the patient possesses the power of turning the eye a little inwards and downwards; this arises from contraction of the inner border of the inferior rectus. Mr. Liston is in the habit of partially or completely dividing this muscle in all these cases, and this has been done in about ten instances. The only and best criterion of the completion of the operation, is the total inability of the patient to move the cornea towards the inner canthus from the centre of the orbit. If this exist, there is little fear of any return of the distortion of the eye; and to effect this purpose, it will sometimes be absolutely necessary to divide the inner border of the inferior rectus. In four instances the operation has not been perfectly successful; these were all early cases, where, after the division of the internal muscle, the patient still possessed the power of moving the eye somewhat inwards, and before experience had shown the necessity of the division of the depressor. Three of these cases have submitted to a second operation; in all, the inferior rectus has been divided, and the cure is perfect. The fourth, a boy of thirteen years old, is fearful to submit to a second attempt; the eye is drawn downwards as well as inwards, caused, most probably, by contraction of the inferior rectus.

To insure the effect of the operation, the scissors and forceps certainly appear the most effectual instruments; and either for the clear dissection of the inner side of the eyeball, or for division of part of the inferior muscle, they are much to be preferred. By using these, the operator will avoid the danger of doing too little or too much; he will, on the one hand, make certain of cutting all the tendinous fibres which bind the eye in its unnatural position, and he will run no chance of wounding the sclerotic coat and evacuating the humours of the eye, and thus effectually destroying vision. Ineffectual attempts to divide the internal rectus are common-enough occurrences; and cases have presented themselves where it has been necessary to resort to a second operation. The accident of destroying the organ has also happened, and is not unlikely to occur in the hands of those who go rashly and unskilfully to work.

Although such severe injury is done to the coverings of the eye, it is a rare circumstance to see any inflammation follow the operation. Only five cases have presented any such occurrence; and in all it was so slight, that the application of a few leeches to the inner angle of the eye soon relieved all the unfavourable symptoms.

A slight ecchymosis occurs under the conjunctiva, and may continue for some weeks, even after that membrane is entirely healed. In two or three cases a small abscess under the conjunctiva has formed, always of very little importance; it has discharged itself in a few days, and produced no inconvenience. A little caruncle, or large-sized granulation, sometimes springs from the conjunctiva, near the inner canthus; this may be snipped off if of large size, or its growth subdued by the application of sulphate of copper.

The restoration of the perfection of vision is one of the greatest recommendations of this beautiful little operation, and this effect has been most striking in several instances. In one very complete contraction of the internal rectus the eye seemed to have been perfectly disused, and incapable of estimating the distance of objects. This patient, when he shut the perfect eye, presented many of the phenomena of a person restored to sight by the operation for congenital cataract; and it was most interesting to remark the daily improvement in his sight. As the two eyes begin to correspond, both in acuteness of vision as well as uniform motion; some diplopia is occasionally complained of.

The first operations which were performed by Mr. Liston, took place in the early part of May. I have had an opportunity of examining lately some of these cases, and I find that the eyes remain perfectly straight; there appears no reason, therefore, to expect that the other cases will not succeed; and this enables me to say, that out of seventy-four cases one only has been unsuccessful, and this in the person of the young boy above alluded to.

MEDICAL REFORM PETITIONS.

Since our last report, Petitions for Medical Reform have been presented to the House of Commons, from

	NO. SIGNED.
Lisburn, by Mr. Hume	3
Antrim, by Mr. Hume	30
Moira, by Captain Jones	4
Dromore, by Mr. Hume	76
The County of Devon, by Captain Jones	32
The Medical Students of Bristol, by Mr. Wakley	54
Mr. Tarnold, Romsey, by Mr. Wakley	1
The City of York	34
	234
Signatures previously reported	4321
	4555

INFLATED INDIA-RUBBER PESSARIES.

To the Editor of THE LANCET.

SIR:—A variety of engagements have prevented me from reading regularly many of the back numbers of THE LANCET; but since I have had the opportunity of perusing them, I find in No. 1, vol. i., for 39-40, Sept. 28th, that a correspondent, Mr. J. Goodman, of Salford, has inserted a recommendation of an elastic ball of his own construction, as an uterine supporter in cases of prolapsus, with a hope that, through the medium of your Journal, the success of its application might be made known to him, should any deem it worthy of trial. During an extensive practice of seven years at Whitstable, on the north-east coast of Kent, many cases of procidentia, and a few of prolapsus uteri, came under my notice. The common oval flat pessary, in some of the cases of prolapsus, was used with advantage, although not without inconvenience; while other patients were incapable of wearing it, in consequence of the irritation induced. In 1837, Mrs. L., the lady of a wealthy yeoman, came to the coast for the benefit of her health. She had suffered many years from prolapsus; and with the exception of using napkins, and the horizontal position, no other treatment had been adopted for her relief. That she might be able to walk about, I advised one of the oval pessaries: its insertion was not effected without difficulty; and when placed, the irritation was so excessive, that it could not be borne. It then occurred to me, that could a pliable instrument capable of expansion be introduced, it would be effective. This I mentioned to the husband (an exceedingly intelligent man), and suggested the material of which I would have it made, he at once fell into my views, and expressed an anxious wish, forthwith, to give it a trial. A caoutchouc worker, according to my direction, constructed an instrument:—merely an Indian-rubber bulb, with a flexible tube of ten inches in length, having a stop-cock at its end, into which a second tube was screwed, with a mouth-piece at its extremity. The whole was air-tight: the patient herself could introduce it, and inflate it with the mouth to the extent required; the end tube was then removed, and the one attached to the bulb brought over the pubis, and kept close to the abdomen by means of a piece of tape tied around the hips. This instrument was used by the lady alluded to, and it answered the purpose admirably: at the expiration of a fortnight, however, by the action of the secretions, and warmth, it became so lax and altered in its texture, as to burst during inflation. I procured three more from the same man: the second shared the fate of the first; the remaining two were used by other two patients, and were equally good in their aptitude, but ruptured after a short while using. Soon after this period I left Whitstable, and from the advantages I found this instrument to possess over the pessaries in common use, and being desirous of carrying my object into effect, I requested Mr. Maw, of Aldersgate-street, in February, 1839, to make me an instrument on the same principle, leaving to his discretion the material he would use, after apprising him of what had occurred to the others; he sent me one of Indian-rubber, but I have not met with a case of prolapsus to give it trial. Mr. Goodman states, that a patient used his instrument about two months; I should like to know if it continued impervious to air after that time: mine, like his, being made of Indian-rubber, leaves me at a loss to conjecture the cause of its failure, which deterred me from giving it publicity. The comfort and relief expressed both by Mr. Goodman's patient and by those of mine who wore it, the facility of introduction, and its extensive applicability, render it, I think, worthy of consideration. I am not wishing by the insertion of this letter to detract from Mr. Goodman's originality of idea, but to receive some information myself, and trust I shall learn that some one has constructed it of a matter more durable than Indian-rubber. I am, Sir, your obedient servant,

MICHAEL MINTER.

Folkstone, June 25, 1840.

THE AMMONIATED TARTRATE OF IRON.

To the Editor of THE LANCET.

SIR:—The following remarks on the use of the ammoniated tartrate of iron, are forwarded for insertion in your valuable columns. I am, Sir, yours respectfully,

T. H. WARDLEWORTH, Surgeon.

Rochdale, June 24, 1840.

I trust that the following suggestions on the use of that excellent preparation, the ammoniated tartrate of iron, will not be considered obtrusive. Having used that remedy for more than two years, I am enabled to speak with some degree of certainty as to its therapeutical effects. It appears to have been first introduced to the notice of the profession by Mr. Aiken, who recommended it in convulsions arising from exhaustion, hæmorrhagy, inanition, &c.* I have never given it in convulsions arising from any cause, but am in the frequent habit of prescribing it in chorea, chlorosis, scrofula, &c.

* Vide Copland's Dic., p. m. art. Convulsions, sec. 55.

In chorea, after the bowels have been freely acted upon by purgatives, should the disease still continue, I have found, under the use of the ammoniated tartrate of iron, the pale, languid, and vacant appearance of the countenance, the soft and flaccid muscles, with the other concomitants of chorea, give way, and the involuntary twitchings subside. I attended a young lady, æt. 18, who laboured under all the symptoms of chorea in its most aggravated form, with occasional attacks of hysteria; menstruation scanty, of a pale colour, and occurring at irregular intervals. After her bowels had been freely moved, and a variety of other means had been tried, to no purpose, I had recourse to the ammoniated tartrate of iron. I commenced by giving her three grains, thrice a day. In one week from the time of beginning to take the preparation she was enabled to come to my house, a distance of one mile, which was more than she had walked for the last three years: she said that after she had taken three or four doses of the medicine, she felt (to use her own expression) a genial glow of warmth pervade the whole system; and that as her appetite improved, all her other symptoms began to disappear, and in one month from the time of commencing to use the remedy she was perfectly well, so continuing up to the present time, eighteen months.

In scrofula and chlorosis, the benefit that is derived from its use is truly astonishing. In chlorosis its effects are magical, for in a few days after taking it the appetite returns, the dyspnœa subsides, and, instead of panting for breath at every four or five steps, the patient is enabled to ascend the whole flight with speed and ease. The countenance, likewise, begins to show signs of returning health; the lips, cheeks, and nails assume a faint blush, which continues increasing until the patient is, in every particular, restored to perfect health. I could enumerate many cases of scrofula, chorea, chlorosis, &c., but content myself with observing that its action upon the body appears to be, first, that of a diffusible stimulant, giving impetus to the general circulation, causing vivacity of the mind, and a rapid subsidence of all distressing symptoms, creating in the patient a lively hope that health, to which she has been for some time a stranger, is about to be enjoyed. And, secondly, the production of tone and contractility in the various tissues, perhaps, at the same time, supplying that deficiency of iron in the circulatory mass, which generally exists in chlorosis. My formula is the following:—

Ammoniated Tartrate of Iron, 3i.
Water, ℥viij.

Take half an ounce three times a day.

MONÆSIA.

At the last meeting of the Royal Medico-Botanical Society, Dr. Sigmond laid upon the table several pharmaceutical preparations, which had been sent for the examination of the members by M. Derosne, who had obtained them from a new drug recently imported into France from South America, under the name of monæsia. Dr. Sigmond observed, that a specimen of the extract had been some time since submitted to his inspection, by a gentleman who had received it from Dublin, and he must confess that the opinion he had then formed of it was, that it was a compound substance, and not the product of any one vegetable. This idea was founded upon the external appearance, and upon the taste of the drug, not upon any analysis, or minute examination of its structure, for the quantity shown to him was very small. He was persuaded, however, that from the quarter from which this new medicine emanated, there could be no attempt to deceive the medical profession; for it was to an individual whose family were well known as pharmaceutical inquirers, that they were indebted for the present discovery. From the nephew of Derosne, whose labours upon opium, and whose analysis had led the way to our present knowledge of morphia and narcotine, we could only expect truth. The four preparations now placed before them were an aqueous extract, a hydro-alcoholic tincture, an ointment containing an eighth of its weight of extract, and an acrid principle which is obtained by analysis. But Dr. Sigmond could not but express his regret that no specimen of the bark, from which monæsia is supposed to be obtained, was placed before them; M. Derosne had, however, promised that at a very early period he would supply this deficiency; and as that gentleman was present at the meeting he would, although he was unable to address them in English, give them every satisfactory information upon this point. It would appear, from a monograph now placed before the Society, that a French merchant, residing in South America, having witnessed the good effects of a substance employed by the natives in cases of dysentery and of diarrhœa, sent a quantity of the drug to Paris, and it was placed in the hands of M. Derosne, who found it to be an astringent endowed with a sweet taste. About a year and a half after this, he obtained some specimens of the bark of the tree from which he procured an extract, presenting all the characters of the extract previously sent to him, and likewise identical in its composition.

M. Derosne had stated that the pieces of bark were of a deep red colour, of a smooth

fracture, and that they were evidently the produce of a tree of considerable dimension, and probably belonging to the mimosæ. Chemical analysis had shown the bark to consist of chlorophylle, of vegetable wax, of a fatty crystallisable matter, of glycyrrhizine, of an acrid matter somewhat bitter, of a little tannin, of a natural acid not yet examined, of phosphates of lime and magnesia, of a colouring matter analogous to that of cinchona, and, lastly, of salts of lime in combination with the natural acid. In France the preparations had been carefully tried by numerous physicians, amongst them Baron, Lisfranc, Manec, Laurand, and Payen, and they were led to form a high opinion of their effects, more especially in various affections of the digestive organs; it was serviceable in bronchitis, in phthisis, in hæmoptysis, and as an astringent generally. Its external application, in various affections of the skin, had been attended with success. It would appear, that although exerting considerable influence upon the system, it had never produced any bad symptom. The doses were, of the extract, given in the form of pill, from six to twenty grains; as much as forty-five grains had been given in a day; of the tincture, from a drachm to a drachm and a half, in six ounces of water. Dr. Sigmond referred to the experiments that had been made in Dublin, from which it appeared that much benefit had been derived from it as an astringent. M. Derosne would gladly furnish any member with a supply, who would make public the result of his experiments. He concluded by again expressing his hope, that the bark would be furnished to them at an early period; for, without that was laid before them, he felt persuaded that the Society could not with propriety investigate the subject further, although its members would gladly try the effects of any medicine which brought with it such recommendations from their medical brethren in France.

NAVAL SURGEONS & PHYSICIANS.

To the Editor of THE LANCET.

SIR:—In your leading article of June 6, founded on the Report on Naval and Military Promotion and Retirement, you have, I fear, while advocating a sound principle, bestowed unmerited praise on Sir R. Dobson, for denouncing the system of exclusiveness adopted by Dubs and Pures. You have quoted particularly his evidence, that "the late physician of Haslar (Sir Isaac Wilson) *could not*, or *would not*, bleed the captain's superintendent, when threatened with apoplexy." With your permission, I would ask Sir R. Dobson, whether the surgeons of hospitals have ever avoided their duty? Unless, in the following instance, about four years ago, when the assistant-surgeon of Greenwich Hospital, while sufferin from serious disease, had his arm amputated at the shoulder joint by *Mr. Liston* (not a naval surgeon), *who went from London to perform the operation*, notwithstanding there is a "first surgeon at Greenwich," and one thousand medical men in the navy. Now, as Sir Richard Dobson has pointed out that the service was injured by "the physician of Haslar" not bleeding his patient, I beg to inquire, why Mr. Liston, and not the first surgeon of the first hospital in the world, performed the operation alluded to? As to the circumstance of Dr. Wilson declining to bleed,—granting that it was the fact,—was there no palliation in the physician's age, he being then threescore and ten, though otherwise well able to prescribe, and now a hale man of eighty.

In recommending the abolition of the physician's appointment, I fear Sir R. Dobson has laid himself open to remark, for granting that superintending hospital surgeons are appointed instead. The same men must be nominated, and the duties must be the same as now; and it is just possible that the surgeon may be too old to operate in *some* cases, like the physician of Haslar. The physicians' appointments constitute some of the very few prizes of the service, and are the places of reward for such men as Sir William Beattie, Nelson's *surgeon;* Dr. Richardson, Franklin's fellow voyager, the venerable late physician of Haslar. It is because the rewards of the navy are so few, that so many medical men have retired from it, and have sought that eminence on shore which they could not obtain in the service.

I have heard much of the outcry by some people against physicians of the navy; but it must be remembered, that those who received the appointment were chosen from the list of surgeons of the navy; and I even question, whether it was a *sine qua non* that all the physicians so named were possessed of a medical degree. The appellation of "physician of the fleet" was a misnomer from the first, something like the "*Sick* and *Hurt* Board," of which, till within the last ten years, a *general of the army* was the president, under the old jobbing system of patronage. A better day has dawned upon us now, however, and we have the satisfaction of seeing the navy somewhat assimilated to the army. I am, Sir, your obedient servant,

AN OLD MAN-OF-WAR'S MAN.

P. S.—Sir R. Dobson has stated in evidence, that physicians of the fleet will not use any surgical instrument, and *never do;* I beg to say that it is not very many years since Sir Isaac Wilson tapped a patient at Haslar.

*** We have somewhat curtailed this letter, since it is anonymous, although authenticated confidentially.

THE LANCET.

London, Saturday, July 18, 1840.

"*A Bill for taking an Account of the Population of Great Britain, and of the Parish Registers, and of the Annual Value of Assessible Property in England,*" has been laid on the table of the House of Commons, indorsed by three highly respectable names; but we should say, from the internal evidence, neither drawn nor attentively considered by either of the members by whom it is, according to form, said to have been brought in. The Bill is understood, in fact, to have been prepared by Mr. RICKMAN. It is a mere transcript, with some additions, of the previous population Acts, and no account whatever has been taken of the progress of statistical science, or of the improved machinery (introduced under the present Government) which may be made available for procuring a more accurate census than has hitherto been attained with the clumsy expedients which Mr. RICKMAN wielded.

The Bill is divided into three distinct parts, and contains provisions, 1st, for taking an account of the population of Great Britain; 2ndly, for procuring returns of the parish registers of births, deaths, and marriages; 3rdly, an account of the annual value of assessible property in England.

The census is taken in this country once in ten years, and forms the basis of so many political, civil, and statistical operations, that the mode in which it is taken cannot be too carefully considered. The statistics of this country have been thrown back ten years by a grave omission in the last census. The ages of the living were not enumerated, although Mr. MILNE, the able actuary of the Sun Life-Office, demonstrated before a Committee of the House of Commons, that no tables of mortality, or calculations affecting the assurance of life, could be deduced from the ages of the dying alone. The infatuated Mr. RICKMAN persisted in his error, which has, indeed, been exposed and denounced by Mr. EDMONDS, and every writer of any authority since, but can never be repaired. We make this observation not for the purpose of condemning the census of 1831, but to show that similar oversights should be avoided *for the future*, as they are in their very nature irreparable.

We shall now give a rapid sketch of the machinery by which Mr. RICKMAN proposes to work the Bill, and of the facts which he wishes to collect and classify.

And, first, of England.

In England, the overseers of the poor in every parish and place not included in any union, and the relieving officers in unions, or such persons as shall be appointed by the guardians of the poor, are to take an account of the population, according to a prescribed form. For the more effectual obtaining of such accounts, copies of the Act, and of the schedules and forms, are

To be transmitted by her *Majesty's printer* to the *clerks of the peace* and *town clerks* of the several and respective counties, ridings, divisions, precincts, sokes, franchises, liberties, cities, boroughs, towns, and counties; and the said clerks of the peace and town clerks are to distribute the Act, forms and schedules amongst the *clerks of the divisional meetings of justices of the peace;* and also to cause to be delivered to the *high constables*, or, *where there are no high constables, to such other proper officers who have the execution of precepts from justices of the peace* to inferior officers within their respective limits. The high constables (or other proper officers so described as aforesaid) are to deliver, or cause to be delivered, the schedules, with the forms appertaining thereto, to one of the *overseers of the poor* of every parish or place not included in any union for the relief of the poor; also, one such schedule to the overseer or *overseers of every extra-parochial place* within the said limits; or, *if no overseer therein, to some one duly qualified person residing* within such extra-parochial place; and in cases of parishes included in unions, the high constable shall deliver, or cause to be delivered to the *clerk of such union*, a printed copy of the Act, with forms and schedules; and such clerk shall deliver the said schedules, with proper instructions, to the several *relieving officers* of the union, and to such other persons as shall be appointed by the guardians. Therefore the *relieving officer, overseers*, or *other persons* taking to their assistance the *churchwardens*

or *chapelwardens* (or *any persons appointed by any justice of the peace* at the request of such churchwardens or chapelwardens), *sidesmen, parish clerk*, or *vestry clerk*, and employing, if they shall think fit, the *constables, tithingmen, headboroughs*, or *other peace-officers* for such parishes, or any fit *person* or *persons* thereunto appointed, or any two of her Majesty's justices of the peace, shall, upon Tuesday, the 1st of June, in the year 1841, proceed to take an *account in writing of the number of persons* in each parish or place, and inform themselves of the *several particulars* relating to the matters specified in schedule A, by proceeding together or separately from house to house, or *otherwise as they shall judge expedient*, and from *such information* shall *prepare an answer or return to the questions*, according to the form prescribed in the said schedule.

The *original accounts* are to be preserved by the churchwardens. The returns are to be taken before justices of the peace, and transmitted to the high constables, the clerks of guardians, the clerks of the peace, and town clerks, and, finally, to the Secretary of State.

Mr. RICKMAN's machinery, which we have above painfully transcribed, is sufficiently complicated on paper; what it would prove in practice it is not difficult to conjecture. He proposes to employ thousands of persons; and several classes of officers, who have not the slightest connection, nor a shadow of controul over each other; he proposes to employ these persons in operations which are quite foreign to their occupations and ordinary habits; and he seems to imagine that accurate returns could be got in through these multifarious channels.

The parish-register returns are to be procured from the clergy. These returns are necessary to connect the ecclesiastical registers with the new system of registration. The parish-register returns may be safely left in Mr. RICKMAN's hands, for it is desirable that they should be neither more nor less accurate than in the preceding periods, over which the returns already extend.

A return of the annual value of assessible property in England, would furnish much useful information if it were properly executed; but Mr. RICKMAN's scheme for determining the value is as wild and whimsical as every other part of his plan. The *Poor-Law Commissioners* understand this matter infinitely better than Mr. RICKMAN, and it might be safely entrusted to their agency, in connection, perhaps, with the Tithe-Commissioners.

The parish-register returns, and the returns of the assessible value of property, may be conveniently made the subject of two short separate Bills; they are distinct from, and would encumber, a census of the population.

The *Statistical Society of London* have collected and published accounts of the census as performed in the principal kingdoms of Europe, and have suggested, in a report, a plan for performing the census in this country. We do not agree with the details of their plan; but it is infinitely preferable to Mr. RICKMAN's projected Bill, which contains more elements of inaccuracy, and is more stupid and preposterous in the general conception, than any census hitherto attempted in Europe, and, we may add, in America, for we have before us the President's message and Act for taking the sixth census of the inhabitants of the United States.

The overseers, relieving officers, &c. &c. &c., are to proceed from house to house, or *otherwise, as they shall judge expedient*, and to *take an account in writing* of the *number* of persons in each parish. In what form is the *account in writing* to be taken? It is proposed to make three inquiries; 1st, the number of persons of each *sex*; 2nd, the number living at different ages, 0—1, 1—2, 5—10, &c.; and, 3rd, their occupation. It is agreed, by all persons acquainted with the subject, that the census should be by *names*, and that every *person* should form the subject of separate inquiry. The returning officer should simply record facts; he would write in a paper, prepared for the purpose, the number of the house, the *name* of the owner, &c., as in the following example:—

Name.	*Sex.*	*Age.*	*Occupation.*
William Jones.	Male.	40.	Farmer.

The names of the different members of the family would follow. Mr. EDMONDS has

proposed to abridge the record by signs; he would register the state of health, infirmity or disease, and employ S for sick, I for infirm, and H for healthy. The returning officer could thus register three or four families on a page; in the most convenient form for abstraction.

Mr. RICKMAN proposes that the *number* of persons of different sexes, ages, and occupations, should be stated in the original record. The overseer would make the abstract as he went along, and there could be no check on its accuracy. If the *name* and age of every member of the House of Commons were taken down, it would be easy to form an abstract of the numbers living at 20, 30, &c. years. Inaccuracy in this form would be easily detected; it could never be detected by Mr. RICKMAN's method; there would be no check on the overseers' accuracy, and the observations would not admit of re-arrangement; then, what infatuation it would be to entrust the delicate task of reducing the facts to several thousands of overseers, without checks of any kind, without practice, without responsibility, without supervision. True, the overseers did the abstracts for Mr. RICKMAN's previous census; and it is true that the parish clerks published bills of mortality, which served several useful purposes; but are those reasons why the bills of the parish clerks, or the overseers' abstracts, should not be replaced by a better system?

The Registrar-General, it is well known, has divided the whole of England and Wales into 618 districts, which have been again subdivided into 2193 registrars' districts. The registrars record facts respecting the dead, precisely similar to, but of a more complicated nature than any they would have to record in the census respecting the living; they are well acquainted with the districts and the boundaries; and, finally, they are accustomed to correspond with a central office. The returns could be procured, through the superintendent registrars, with infinitely greater certainty and accuracy than through the endless chain of intricate machinery which Mr. RICKMAN proposes to employ.

A Select Committee of the House of Commons would sift the matter to the bottom in three or four days. Medical men, MILNE, EDMONDS, and other eminent actuaries, should be examined on the subject, as they were in 1830.

On the Preservative and Curative Treatment of Pulmonary Consumption. By Dr. AMEDEE LATOUR, Paris.

THE following analysis of a work lately published by Dr. Latour on pulmonary consumption, may serve as a companion to our analysis of Mr. Bodington's pamphlet on the same subject.

In this, the first part of his treatise, Dr. Latour confines himself to the hygienic and curative treatment of consumption. The hygienic rules are thus summarily laid down by the author:—

1. A phthisical patient should inhabit a dry, airy locality, well exposed to the influence of the solar rays. Residence in any large city predisposes to consumption.

2. The present state of our knowledge does not permit us to point out with precision the climate which is most suited to consumptive patients. The best advice that we can give to them is, to choose a temperate climate where the variations of temperature are neither sudden nor frequent. Travelling, and particularly voyages, are attended with decided advantage in the early stage of phthisis.

3. The patient should be warmly clothed, and covered with flannel from head to foot.

4. He should take habitually some moderate exercise, as walking, riding, &c. Exposure to the open air and to the rays of the sun are absolutely necessary.

5. He should exercise the mind in a moderate degree, but avoid all strong moral emotions.

6. He must renounce any profession which requires strong muscular exertion; a bent position of the body; residence in a damp, moist place, &c.

7. The food of a consumptive patient should be rich and nourishing.

In the second chapter of his work, Dr. Latour explains a mode of treatment, which he affirms to have been attended with very

great success. He commences by laying down as a rule that, in a vast majority of cases, pulmonary tubercles depend upon general causes which tend to disturb or alter the function of nutrition; hence, he concludes, that our first case should be directed to this function, from the derangement of which are produced the local disorders or disease of the chest.

Dr. Latour was led by chance to the discovery of the remedial means which he so warmly recommends in the treatment of phthisis. While walking on a fine day in the month of May, 1837, along the avenue which extends from Paris to Neuilly, he met a caravan filled with monkeys; the latter were enjoying their morning repast: Dr. Latour inquired of the master how he contrived to keep them in such excellent health; the answer was, that he (the master) was possessed of a remedy which restored the animals to health as soon as they became ill; on saying this the master pointed out a monkey which had coughed for the last few days, and gave it a piece of carrot, steeped in a colourless fluid. The monkey devoured the carrot with avidity; the white fluid was merely a strong solution of salt in water. This fact, and the assurance of the master that the use of salt water preserved his monkeys from a disease to which they are peculiarly liable in cold climates, suggested to Dr. Latour the idea of trying the remedy on the human subject in cases of pulmonary consumption. He has already employed it in eight cases, amongst which the following is one of the most remarkable:—A gentleman, 50 years of age, of broken-down constitution and scrofulous habit, was long subject to colds and occasional spitting of blood; his voice was feeble and hoarse; the respiration difficult and oppressed; cough constant, with an expectoration of grey opaque matter, mixed with mucus, and occasionally streaked with blood; skin hot; pulse 98; diarrhœa; and copious night-sweats. On examining the chest a *cavernous râle* was detected at the summit of the right lung, with extensive absence of the respiratory murmur around; *pectoriloquy* and absence of the respiratory sound on the left side, except at the lower part, where it is mixed with some crepitant rattle. The patient has never been submitted to any treatment. He was ordered to take a drachm of sea-salt every morning in a cup of rich broth, and to eat boiled meat.

Having continued this mode of treatment for eight days (to Oct. 10), he found himself much improved; appetite better; cough, expectoration and heat of skin diminished; night-sweats and dyspnœa less troublesome. He continued the salt, and took a more nourishing diet, with a little claret wine.

November 3. Improving; the diarrhœa has ceased. To continue the remedy and augment the diet.

30. The chest was carefully explored. The only sound was one similar to that produced by a bellows while being filled with air; in some points the respiratory murmur was exaggerated; he now coughed but seldom, with an expectoration of pure mucus; general state considerably improved; getting fat.

On the 15th of December the patient was nearly well, all the local and general symptoms having disappeared after the use of the salt during seventy-four days. Towards the end of February, Mr. N. seemed to enjoy excellent health; the respiration was heard all over the chest, except under the clavicles, where the bellows-sound still existed.

According to Dr. Latour, pulmonary consumption may present itself under three forms; the scrofulous, the inflammatory, and the nervous. It is in the treatment of the first form that chloride of sodium is most beneficial; this remedy is always powerful, but greater chances of ultimate success are, of course, offered when it is employed in an early stage of the disease. Its first effect seems to be on the digestive functions, which become more active: the dose with which M. Latour commences is half a drachm, in a cup of broth, increased after three or four days, and gradually carried to two drachms. Generally speaking, it should be administered for a couple of months, although the beneficial effects are often produced in a few weeks.—*Abridged from French Lancet, No. 74, 1840.*

On the Cure of Congenital and Accidental Contractions of the Limbs by the Subcutaneous Division of the Contracted Muscles or their Tendons. By Professor Dieffenbach, *Berlin.*

The name of Professor Dieffenbach has been recently placed before the public in the most favourable manner as the inventor of the new operation for the cure of squinting. M. Dieffenbach has, for many years, devoted a considerable share of attention to the cure

of deformities by surgical operations, and his practice has been productive of the most beneficial results. The following analysis of a pamphlet which was published not long ago by M. Dieffenbach on this subject, may, therefore, present some interest, not only to our medical readers, but to the public generally. Within the space of a few years, M. Dieffenbach has successfully treated three hundred cases of club-foot, sixty cases of torticollis, two hundred and fifty cases of squinting, besides a vast number of contractions of the hip, knee, and elbow-joints, of the fingers, toes, &c. The varieties of club-foot are very numerous, and in many cases, especially of *varus*, the deformity of the foot is carried to the highest degree. Sometimes the front of the foot is drawn upwards and sideways, so that the great toe almost touches the shin-bone. Formerly, cases of this kind were abandoned as incurable, but under the skilful treatment of M. Dieffenbach they admit of complete cure. The surgeon, when a case of this formidable kind presents itself to him, should first endeavour to convert the varus into a pes equinus, and then cure the latter deformity. For this purpose he must first divide, under the skin, the tendons of the principal muscles of the sole of the foot, and then all the extensor tendons of the foot. This done, a straight splint is to be placed on the outer side of the limb, extending from the knee to a little beyond the sole of the foot, and fixed with bandages, which tend to bring down the foot to the extremity of the splint. By the careful application of this simple means the deformity is gradually converted into one of *talus*, and the great difficulty is overcome. The tendo-Achillis is now divided, Stromeyer's apparatus applied, and the most ill-shapen feet restored to a normal appearance: some of the patients, of this class, were able to learn to dance after having been cured. The greatest number of tendons divided amounted to twenty, in cases of this kind.

The *flat foot* is a species of deformity which had hitherto been almost totally neglected by surgeons and orthopedists. As this deformity could not be cured by mechanical means, it was generally allowed to go on, and when it arrived at its highest degree, the sole of the foot, instead of being concave, became convex, the heel being drawn up, and the anterior part of the foot, with the toes, elevated from the ground. All these cases were treated by the section of all the long extensor tendons, either on the dorsum of the foot or above the ankle-joint; the foot instantly fell as if paralysed. After a few days, long, straight splints were placed in front of, and behind the leg, and their application was soon followed by complete cure. Sometimes the division of the extensor muscles was too efficacious—that is to say, the flat foot was converted into a pes equinus, but the muscular equilibrium was quickly restored by division of the tendo Achillis.

In the treatment of torticollis, M. Dieffenbach sometimes divides the sternal portion, sometimes the clavicular portion, and occasionally both origins of the sterno-cleido-mastoid muscle, when shortened. If the patient be young, the head immediately becomes straight after the operation, and a cure is obtained in a few days; and, in most cases, the lateral curvatures of the spine, which accompany torticollis, disappear gradually. The section of the muscles and tendons connected with the knee-joint, has been frequently performed by M. Dieffenbach with the greatest success; in one case, that of a boy ten years of age, the joint was so much contracted that the heel was in contact with the buttocks. In the more complex and difficult cases, which are often classed together under the name of *spontaneous dislocation* of the hip, very great benefit has been derived from the section of the shortened muscles or their tendons. But the surgeon must not imagine, that when he has divided those parts, nothing more remains to be done; the mechanical treatment will require the greatest attention, and, in many cases, must be continued for a very considerable length of time. Strong, though gradually exercised extension, by means of Stromeyer's apparatus, often occasioned insupportable pain, and rendered it necessary to suspend the mechanical treatment; hence M. Dieffenbach was led to adopt the following mode of proceeding. After having divided the shortened tendons, he brings the deformed limb by a rapid and forceable extension or flexion (as the case may demand) to a straight position. During this movement a cracking noise is heard, as if some of the tissues were torn across; the limb is then enveloped in flannel, and sustained in its position by a light wooden splint. The

pain occasioned by this process is much less, according to the author, than that which is produced by slow and gradual extension. Contractions of the upper extremities, and of the fingers from rheumatic or gouty affections, were frequently cured by division of the tendons; and M. Dieffenbach remarks that these deformities are generally cured with much greater facility, than analogous lesions of the lower limbs. In two patients, labouring under organic disease of the brain, which had occasioned permanent flexion of the forearm, with spasmodic contraction of the fingers on the palm of the hand, M. Dieffenbach divided the tendon of the biceps, flexor carpi radialis, flexor carpi ulnaris and flexor digitorum. A remarkable improvement was obtained, and patients were enabled to grasp and hold objects of a certain size. Finally, in four hundred operations which had been performed by the author, up to the period when the present treatise had been published (1839), he has never seen any nervous accidents, hæmorrhage, or troublesome suppuration, produced by subcutaneous division of the tendons.

TREATMENT OF VARICOSE VEINS BY CAUTERISATION WITH THE VIENNA PASTE.

The frequent occurrence of varicose veins in the lower extremities, affecting principally those persons who, from necessity, are compelled to undergo great fatigue, renders the possibility of radically curing them a subject worthy of serious consideration. The disadvantages, or rather dangers, attributed to the diverse surgical operations generally employed, have appeared to some surgeons sufficient to counterbalance any amelioration that might result from them, and to authorise their total rejection, substituting in their place a constant and moderate pressure. That compression, methodically applied, so as to give support to the limb generally, can alleviate, to a certain degree, the existing infirmity, is not to be denied; but, unfortunately, even this is of little avail under certain states of varix, as when, from some adventitious circumstance, or as a consequence of inflammation, a solution of continuity has taken place, giving rise to frequent, and sometimes alarming hæmorrhage, or more generally terminating in an ulcerous state, difficult in most cases to cure, and in some impossible, at least permanently, unless, as is a well-known fact, the varicose state of the surrounding veins, which is the principal cause of the ulcers not healing, be removed. To say that varix does not in itself constitute a disease, but is simply an infirmity, seems to us to be at best a play upon words, for, unfortunately, the difference between infirmity and disease cannot always be distinctly drawn; and in this case, that which would be simply an infirmity to a person above the necessity of exertion, becomes a disease, and a most serious one, to the individual compelled to daily labour: moreover, to assume as an invariable rule that, because, in some unfortunate case, death has resulted from our endeavours, we are on that account not justified in attempting to cure varicose veins, appears to us to be an unsound maxim, unworthy of the surgical art, as will forcibly strike any one who has had opportunities of witnessing the miserable state of persons thus affected, and who cry out for some relief, not to their sufferings but to the infirmity, or, rather, disease, which precludes them from labour.

Amongst the various remedies that have been successfully employed, cauterisation of the varix with the caustic potash, seems to us to have been cast into an undeserved oblivion. First employed by Ambrose Paré and Guillemeau, it remained unnoticed until Sir B. Brodie re-examined its efficacy; but he mentions it only to blame, for according to him the cure of the varix affords but an inadequate compensation for the pain produced by the caustic, and the inconvenience arising from the tedious healing of the ulcer, which remains after the slough. More recently, Mr. Bonnet, surgeon of the Hospital of Lyons, made several experiments, the result of which he published in the "Archives Gen. de Med." of May and June, 1839; but it is not to the merits of this plan that we wish to call the attention of the medical world, but to a modification which to us appears important, recently introduced by Mr. Laugier, surgeon of the Hôp. Beaujon at Paris.

As we have already stated, the objections made by Sir B. Brodie to the use of the caustic potash are: 1st, the pain; and, 2ndly, the length of time required for the healing of the ulcer resulting from the slough. Mr. Laugier imagined, that if, before applying the caustic, the skin should be divided down to the vein, a smaller quantity of caustic would be required, its action more prompt, and the slough necessarily smaller. He also substituted a composition, consisting of equal parts of quick lime and caustic potash, to the caustic potash alone; the advantages he attributes to their composition, known under the name of Vienna paste, are, 1st, a more rapid and certain action; the caustic potash, when employed alone, as was remarked by Mr. Bonnet, sometimes did not cauterise sufficiently deep, and required two or three

applications; and, 2ndly, the production of less pain.

Several other objections can also be made against the use of the potassa fusa, according to the old plan. From the extent and depth of the sloughs, Mr. Bonnet derived two laws: 1st, that the caustic can only be applied on veins corresponding to muscles, from fear of affecting the periosteum; 2ndly, that, except in cases of spontaneous hæmorrhage, the internal saphena should not be cauterised whenever the external also was affected with varices, since the latter, the circulation in the internal saphena, being interrupted, could but increase. Mr. Laugier's plan obviates these inconveniences completely, the action of the paste being prompt and easily localised, the quantity employed being small, the sloughs being necessarily limited, and the loss of skin almost null, we are enabled to operate not only in front of the tibia and of the condyle of the femur, but also on both saphenæ at the same time, without fear of affecting the bone, or of depriving the limb of too great an extent of skin.

But the most essential advantage in the method of Mr. Laugier is, that by the immediate and prompt cauterisation of the vein, the danger of severe phlebitis is avoided. In applying the caustic potash according to the ancient method, it often happens that its action does not extend sufficiently, and that the vein is either opened or simply laid bare; circumstances, it is evident, tending to produce diffuse inflammation much more than if the vein had been totally disorganised. By the immediate application of the paste the vein is deeply cauterised, and in twenty minutes, or at most half an hour, a coagulum has formed, which, according to Mr. Laugier, has the advantage of isolating before inflammation of its walls has supervened, the disorganised portion of vein from the general venous system and the circulating fluid thus preventing the absorption of pus, if any should form, into the system; in fact, circumscribing the inflammatory process, and preventing its becoming diffuse.

Another important consideration is the possibility of achieving a radical cure. The effect of every mechanical injury to a venous trunk is the production of inflammation of its lining membrane, more or less severe, known under the term phlebitis; but putting aside the severe form of inflammation, and confining ourselves to the consideration of what is called adhesive inflammation, it will be seen that the first appearance is the deposition of a certain quantity of coagulable lymph, extending more or less along the cavity of the vein, according to the extent of the adhesive inflammation itself, necessarily producing agglutination of the opposite walls of the vein, and, if uninterrupted, obliteration of the venous canal. But, as in the union of wounds, circumstances may arise to disturb their beneficial march, and the agglutination of the venous walls may not be sufficient to resist the impulse of the column of blood when exertion is made, or the obliteration of the canal may simply be partial, extending only for a few lines, the remainder of the canal remaining pervious, and still giving passage to the blood when brought by the neighbouring anastomosing branches. This, as daily experience shows, often happens after treatment of varices by the ordinary methods, especially after the use of pins, or after simple division of the vein; but, from the observations of Messrs. Bonnet and Laugier, it would seem that cauterisation, when effectually made, disorganises completely the vein, and determines a total obliteration of its canal through the whole extent comprised between the cauterised spots, and in neighbouring portions of vein, or, at least, to such an extent, above and below the eschars, as to render a return of the disease in the same veins almost, if not totally, impossible.

The following is the plan that Mr. Laugier adopts in operating:—A fold of skin, either transverse or in the direction of the vein, being raised, a small incision from five to six lines is made, and the vein laid bare. The slight hæmorrhage that results from the incision is immediately arrested by the nitrate of silver; for it was remarked by Mr. L., that the blood diluted the paste and impaired considerably its agency. The lips of the wound are then covered with small slips of charpie, to defend them from the action of the caustic, and the wound is filled with the paste, generally requiring about the size of a small hazel-nut: the action of the caustic creates but little pain, and, in fact, most of the patients find the application of the nitrate of silver the most painful part of the operation.

The number of applications must depend on the extent of the varices, but generally on the first day only two are made on the most prominent varix, about six or seven inches distant from each other; the subsequent applications must depend on the state of the limb. It is requisite that the patient should remain perfectly quiet, until the caustic has formed an eschar, to prevent the paste from escaping, and destroying the neighbouring skin: this requires from thirty to forty minutes, and then the eschars, being cleaned of the remaining paste, are covered with diachylum. It is, of course, necessary that the patient should remain in bed until the sloughs are fallen; he then is allowed to make moderate exertion, and, when no untoward circumstances arise, the cure is generally affected in six weeks or two months.

In a future communication some cases will be forwarded: already from thirty to forty patients have been operated on by Mr. L., and no accidents have as yet occurred;

nevertheless, two deaths have taken place during the treatment, but under circumstances entirely unconnected with the operation. We will mention them in our next, as they are interesting, inasmuch as they show the state of the venous canal, after the application of caustic. Most of the patients operated on have been perfectly cured; and in those cases in which the varices have not been totally obliterated, such an amelioration has been effected, as to render the patients capable of returning to laborious occupations, which previously they were forced to desist from.

UNIVERSITY OF LONDON PRIZE EXAMINATIONS.

Of the fifty-two candidates inscribed for examination, three retired before the ordeal commenced, four disappeared during the examination, and seven were rejected. The written answers were many of them excellent, and did honour to the teachers under whom the writers had been educated. The *viva voce* examination in anatomy was conducted with the aid of a well-dissected body, and of a number of beautiful preparations. Several of the candidates who had fallen short of the rest in the written, were enabled to regain their credit in the *viva voce*, examination, and in the required demonstration upon the body and preparations.

Tuesday, July 14, *Morning*, 10 *to* 1.

ANATOMY AND PHYSIOLOGY.

Examiners, Mr. KIERNAN and Dr. SHARPEY.

CANDIDATES MAY ILLUSTRATE THEIR ANSWERS BY SKETCHING THE PARTS THEY DESCRIBE.

1. Describe the parts successively brought into view in dissecting, from the skin of the perineum to the inferior fundus of the bladder, that space which is bounded anteriorly by the arch of the pubes, posteriorly by the rectum, and on each side by the ramus of the ischium and obturator internus muscle.

2. Describe the internal structure of the kidney; and state what you conceive to be the relation of the blood vessels to the ducts, adducing the evidence.

3. Describe the intimate structure and chemical composition of interarticular cartilage, and state in what respects it differs from articular cartilage.

Tuesday, July 14, *Afternoon*, 3 *to* 6.

1. Give the dissection required to expose the course of the vertebral artery, from the third cervical vertebra to the foramen magnum; commencing at the integuments on the back of the neck, and describing the several parts successively met with in the dissection.

2. Describe the mucous membrane of the stomach and small intestine; the description to include that of the ultimate arrangement of the blood-vessels, the epithelium, the follicles of Lieberkühn, and the glands of Brunner and Peyer. What recent investigations have been made into the structure of the last-named bodies? Describe also the development of the alimentary canal, with the exception of the mouth and fauces.

3. Describe the erectile tissue, and state what recent researches have been made into its structure. In what other parts of the body, besides the corpora cavernosa and corpus spongiosum, has it been said to exist, and what is your own opinion upon this point?

Wednesday, July 15, *Morning*, 10 *to* 1.

CHEMISTRY.

Examiner, Mr. DANIELL.

1. How may carbonic acid be generated and condensed into the liquid state? Explain the phenomena which occur when liquid carbonic acid is allowed to evaporate rapidly.

2. Explain and illustrate the meaning of the term diathermancy: in what do diathermanous bodies differ from diaphanous and transparent bodies?

3. What are the principal phenomena of polarised light; and how may light be polarised?

4. How may the diffusion of gases be measured; and what is the law of their diffusion?

5. Describe the construction and explain the action of the electrical condenser.

6. Describe the mode by which a voltatype copy of a medal may be obtained, and explain the process.

7. What is methylene? How is hydrate of methylene obtained, and what is its relation to alcohol?

8. What is the constitution of phosphoric acid? What are its relations to water and salifiable bases?

9. What are the principal constituents and characters of the fusible calculus, the mulberry calculus, and of red gravel?

10. Describe the properties of sulphur and selenium; state their equivalent numbers, and the principal points of resemblance between these two elements and their compounds.

Wednesday, July 15, *Afternoon*, 3 *to* 6.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

Examiner, Mr. PEREIRA.

1. What are the crystals contained in the bottles marked respectively A, B, C, D, E,

and F? Are they hydrous or anhydrous? what are their primary forms? what is their atomic constitution?

2. The fruits contained in the bottles marked respectively G, H, I, and K, were found in Alexandrian senna. State the botanical name, natural order, and Linnæan class and order of the plants from which they were respectively derived.

3. How is the presence of nitrate of potash in fused nitrate of silver to be determined? Bisulphuret of mercury is sometimes adulterated with red lead,—by what means would you detect the fraud? How would you ascertain the presence of carbonate of soda in the bicarbonate of soda of commerce?

4. Describe the method of making *ammoniæ sesquicarbonas* Ph. L. Explain, according to the ammonium hypothesis of Berzelius, the chemical changes which occur in the process.

5. State the most important chemical distinctions between *morphia*, *narcotina*, and *codeia*; also between *strychnia* and *brucia*; and between *cinchonia* and *quina*.

6. How is oil of vitriol made? Explain the theory of the process.

7. Why is the *liquor ammoniæ acetatis*, as usually found in the shops, incompatible with acetate of lead?

8. In what part of barks does their medicinal activity exclusively or principally reside; and how do you explain the fact of its residing in one part chiefly?

9. What are the most important constituents of the mineral waters of Cheltenham and Harrowgate; and for what diseases are these waters respectively adapted?

10. State the peculiar or characteristic symptoms produced respectively by opium, *hyoscyamus*, *belladonna*, tobacco, *digitalis*, aconite, *conia*, and *strychnia*.

11. Under what circumstances are chalybeates to be preferred, as tonics, to the vegetable bitters?

12. Describe the effects, uses, and modes of administration of iodine.

PROSECUTION OF MEDICAL MEN IN IRELAND.

A Bill has been prepared and brought into the House of Commons by Mr. O'Connell (and Mr. Warburton), to prevent actions at law from being commenced by the Governor and Company of the Dublin Apothecaries' Hall, against medical men who are alleged to be practising illegally as Apothecaries in Ireland, and to stop, "for a limited time," legal proceedings already so commenced. Our readers have become well acquainted, from reports and communications recently published in this Journal, with the circumstances under which this Bill has originated. The preamble quotes that clause in the Dublin Apothecaries' Act which enacts, that no person shall open shop or act as an apothecary in Ireland, until he has been professionally examined at the Apothecaries' Hall in Dublin.

The Bill then proceeds to say, that the Governor and Company of the Hall have not discharged their duties under the aforesaid Act, and that many physicians and surgeons, not wilfully intending to act contrary to the provisions of the said Act, but believing that it had fallen into abeyance, have from time to time compounded and vended medicines, and practised as apothecaries, without having been examined by the said Company, and are thereby liable to the penalties under the said Act, and that proceedings for their recovery have been or may be instituted by the Company.

The third clause of the Bill states, that whereas an inquiry was lately instituted by Parliament into the constitution and proceedings of the said Company, and that as a Bill is about to be introduced for their regulation, as part of a measure for the general regulation of the practice of medicine in these kingdoms, it is expedient that the law proceedings above indicated should be prevented, or, if commenced, should be stayed until the pleasure of Parliament has been ascertained on the subject.

Be it therefore enacted, that immediately after the *passing of this Act*, any person against whom any suit shall have been prosecuted to recover any penalty incurred under the Apothecaries' Act, may apply to the Court in which such suit shall have been commenced, or if such Court shall not be sitting, to any judge of either of the superior courts in Dublin, for an order that all further proceedings may be stayed until November the 1st, 1841. Every such court or judge is required, upon such application, and proof that sufficient notice of it has been given to the plaintiff, to make such order. But in all cases in which any such suit shall have been commenced subsequently to the *passing of this Act*, the court or judge shall make an order for discontinuing the same, without payment of any costs, and every such suit shall be forthwith discontinued. Nothing in the present Act shall enable any person to recover back any money already paid in pursuance of any prosecution instituted against him by the Apothecaries' Company.

MR. OWEN AND MR. NASMYTH.

We have received from Mr. Owen a reply to the letter of Mr. Nasmyth in THE LANCET of July 11, but it is time that we should end this controversy in our pages, for the correspondence exceeds, or threatens to exceed, all reasonable limits as a contribution to a medical journal. The present letter of Mr. Owen fills twenty-four sides of folio post; that is, 48 pages of quarto, close manuscript. To a simple rejoinder from Mr. Owen we should have offered no objection, for that might be read, and would have suited our space; but into another dozen pages of solid octavo print we will not convert a bushel of abuse and criticism containing one grain of matter to the point. That we decide with propriety in not suffering our pages to be occupied by this fresh correspondence, leading to endless counter-statements and reviews of the questions in dispute, will appear from a single extract, taken from such part of the manuscript as most readily allows an isolated quotation to be made. After pronouncing Mr. Nasmyth (whom this extract will show to Mr. Owen that we have no especial desire to protect in declining to insert the entire 24 folios) to be quite as "deluded with respect to his own importance as ever was the houester Malvolio, under the influence of his crossed garters and yellow stockings," Mr. Owen thus proceeds to show, with regard to some avowed vexation and indignation of his opponent, that

"The naturalness of an act is, in man, according to the nature of the individual, and, in the lower animals, according to the nature of the beast.

"For example,

"Craft is natural to a fox.

"To steal precious things is the nature of the daw and magpie.

"It is natural to the hog to wallow in the mire.

"To receive a favour, and jabber impotent malice at the donor, is the nature of a baboon. And so, when a man of science devotes the little leisure and cash he may have to spare to the advancement of dental anatomy, and when, instead of reserving his discoveries for the benefit of one, he publishes them, without eye to profit, for the benefit of all, while other dentists are grateful and applaud the act, to be enviously vexed and indignant is *the nature of a Nasmyth*."

Controversy of this sort may be presented, under arrangement with our publisher, gratuitously to the profession.

DR. FRANZ

PRESENTS his compliments to the Editor of THE LANCET, and informs him that the name of the gentleman whose letter appeared in THE LANCET of last Saturday, July 11, is not "Ulimck," but SCHENCK, and that he is a highly respectable merchant, whose family Dr. Franz has attended professionally for a long time. On examining "Robson's Directory" of 1840, and also the "Post-Office" and "Pigot's Directory" of 1840, Dr. Franz finds that Mr. James, the combmaker, lives at No. 11, and not at No. 10, Addle-street, and that against No. 10, the firm of J. J. Schenck and Co. is entered.

19, Golden-square, July 13.

*** Our copy of "Robson's Directory" is dated 1839, and therein No. 10 is stated to be occupied by J. James, and No. 11 by John Line, carpenter. Messrs. Schenck may be recent arrivals. An older *status* in English society would have convinced the advertiser that his liberal proceeding, in favour of Dr. Franz, was precisely that of the more ingenious class of medical quacks.

BOOKS RECEIVED.

An Essay on the Treatment of some Affections of the Prostate Gland. By R. A. Stafford, Surgeon to the St. Marylebone Infirmary. London: Churchill. pp. 86.

A General Outline of the Animal Kingdom, and a Manual of Comparative Anatomy. By Thomas Rymer Jones, F.Z.S. Parts 10, 11. London: Von Voorst.

The Library of Medicine, vol. 4, Practical Medicine, arranged and edited by Alexander Tweedie, M.D., F.R.S. London: Whittaker and Co., 1840.

A System of Anatomical Plates, with descriptive letterpress. By John Lizars, F.R.S.E. Part 12.

A Manual of Pharmacy for the Student in Veterinary Medicine; containing the substances employed at the Royal Veterinary College, with an attempt at their classification, and the pharmacopœia of that Institution. By W. J. T. Morton, Lecturer on Veterinary Materia Medica, &c. Second edition. Longman and Co. pp. 296.

Cursory Notes of the Morbid Eye. By Robert Hull, M.D., Physician to the Norfolk and Norwich Hospital. Longman and Co. pp. 249.

Cyclopædia of Anatomy and Physiology. Edited by Robert B. Todd, M.D., F.R.S. Part 19. London: Sherwood and Co.

Cyclopædia of Practical Surgery, embracing a complete view of all the departments in operative medicine. Edited by William B. Costello, M.D. Part 6. London: Sherwood and Co.

On the 14th instant, a Message was brought from the House of Lords to the Commons, stating, that the Lords had agreed to the amendments proposed by Mr. WAKLEY in the VACCINATION BILL, and adopted in the Lower House, with an additional amendment made by the Lords since the passing of the Bill by the Commons, making inoculation *liable* to be prosecuted as a misdemeanour. Before the close of next week, this Bill, obtaining the Royal assent, will have become the law of the land.

If this Act be regarded according to its *powers* and *influence*, it may be christened with the name of the SMALL-POX PREVENTION ACT, since it will effectually arrest inoculation, and fail to *extend vaccination*. Popular prejudices are not likely to be subdued by men with the ogre-like countenances and abhorred voices of the Poor-Law Commissioners. The invitations to "come and be vaccinated" will terrify, not persuade. Very opposite results, we believe, would have followed the enactment of the vaccination clauses and schedules of the Bill which originated in the Commons. But the lust for power, and the grim economy, of the rulers at Somerset House, demanded and obtained this sacrifice. And now a fresh engine of torture is created for the apathetic slaves of the Medical Colleges and Corporations.

BARON GRAEFE.—We have to record the death of this distinguished surgeon; he died at Hanover, where he had arrived for the purpose of operating on Prince George of Cumberland.

TO CORRESPONDENTS.

Daphne Mezereon.—The controversy upon this subject in our pages must now cease; we have received several polemical communications from other sources than the principals, which we decline to insert. This rejection does not, however, extend to any real information, or to any experimental inquiry which may be made, to discover the relative medicinal qualities of the different drugs.

The absurdity perpetrated by Captain Hardman should be forwarded to the gentleman who recently pronounced at Newton that inoculation for the small-pox *might* be demanded by "circumstances." The captain's "letter to the House of Lords," would afford a model for the apologists of inoculation.

The meeting of the British Medical Association of July 7th, and the notice of the correspondence with the Government authorities, must be reported in the next LANCET, as our pages this week are unavoidably preoccupied.

The correspondent who mentions the death of Dr. Severn, might send us any information he possesses respecting the deceased gentleman, that is worthy of public notice.

Mr. Nasmyth requests us to correct the following error in his letter contained in our last Number:—At page 572, col. 1, line 42, for "published" read *printed*.

A correspondent writes thus:—Mr. Ancell's account of Dr. Hall's views of the nervous system, in your Number for July 4, is not correct. I shall make but one quotation as an example. Mr. Ancell says, "In Dr. Hall's system the passions are made a part of the excito-motory phenomena." This is incorrect. Mr. Ancell does not appear to have understood the author whose opinions he intends to set forth.

The cases from the *Cheltenham Hospital*, *Mr. Ed. Clarke's letter*, and *Mr. Houston's*, *Dr. O'Beirne's*, *Mr. Hocken's*, and *Mr. Mosgrove's* communications are designed to be inserted.

A Poor Assistant.—The information must be correct, since it was printed verbatim from the Company's circular.

The isolated proposition of *An Old Surgeon* cannot be made in Parliament.

Humanitas (Manchester) shall again receive his letter on the S. S. B. Infirmary, to recopy it on stout paper, as the printers cannot read many parts of it.

Junius.—The Apothecaries' Act is "perpetual," that is, so far as concerns its freedom from any suicidal clause.

An Observer.—The proceeding was strange, and is to us inexplicable. The chief officer—if the allegations be true—is indictable for "unlawfully, obstinately, and contemptuously neglecting and refusing," &c. The inquiry was not "virtually held" by the "questioning" referred to. *The law* makes the inquiry "necessary;" but the law may be (of course illegally) disobeyed.

The cases forwarded by *Mr. Lightfoot* and *Mr. George Miller*, are in hand.

The "Dublin Journal" of July 15, has reached us. The Editor is altogether wrong, excepting in one sentence:—"This may, *for aught we know*, be very *good* and *prudent* advice."

We have received letters from *Mr. Rowe* and *Mr. Smith*, which shall be inserted next week. These must conclude the controversy in the pages of THE LANCET.

Epidermis.—Such works with *plates* are never "cheap," unless they be imperfect. The work of Dr. A. T. Thomson, now publishing in parts, is such an one as our correspondent should indulge himself by purchasing.